```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Word size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OM nucleic -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                         0 000000
       Pred. No. is the nu score greater than and is derived by a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB DB
                                                                                                                                                                                                                               Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq
      1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      nucleic search, using sw
                                                                                                                                                                                                                                                                                                                             Published Applications NA New:*

1: /SIDSS/ptodata/2/pubpna/USO8 NEW_PUB.seq:*

2: /SIDSS/ptodata/2/pubpna/USO6 NEW_PUB.seq:*

3: /SIDSS/ptodata/2/pubpna/USO7 NEW_PUB.seq:*

4: /SIDSS/ptodata/2/pubpna/USO7 NEW_PUB.seq:*

5: /SIDSS/ptodata/2/pubpna/USO9 NEW_PUB.seq:*

6: /SIDSS/ptodata/2/pubpna/USO9 NEW_PUB.seq:*

7: /SIDSS/ptodata/2/pubpna/USO1 NEW_PUB.seq:*

8: /SIDSS/ptodata/2/pubpna/USO1 NEW_PUB.seq:*

9: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq2:*

10: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

11: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

12: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

13: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

14: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

15: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

16: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

17: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

18: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

19: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*

10: /SIDSS/ptodata/2/pubpna/USON_NEW_PUB.seq3:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                    OLIGO_NUC Gapop 60.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-712-654-34
560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    April 12, 2006, 05:20:02; Search time 2287.11 Seconds (without alignments) 986.217 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9281099 seqs, 2013915447
      acaactggtacatctgcgcg.....ggagcaatgagaattacacg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration
                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                      e number of a
nan or equal
by analysis o
   Gapext
                                                                                                                                                                                                                              В
    4 US-11-121-849-630382

US-09-925-065A-648675

US-09-925-065A-23976

US-09-925-065A-23977

US-09-925-065A-23977

US-09-925-065A-23977

US-09-925-065A-643642

0 US-10-301-480-308849

0 US-10-301-480-92257

0 US-10-301-480-92257

0 US-10-301-480-92258

1 US-11-079-463-724

US-09-925-065A-906587

US-09-925-065A-90587

US-11-01-244-152034

US-11-083-784-152034

US-11-083-686-52014

US-09-925-065A-539146
                                                                                                                                                                                                                                                                                    results predicted by chance to have a l to the score of the result being printed, of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18561424
Sequence 630382,
Sequence 648674,
Sequence 648675,
Sequence 223976,
Sequence 223977,
Sequence 308849,
Sequence 308849,
Sequence 922257,
Sequence 922257,
Sequence 92258,
Sequence 912757,
Sequence 912757,
Sequence 912757,
Sequence 912717,
Sequence 512034,
Sequence 52011,
Sequence 539145,
Sequence 539145,
                                                                                                                                                                                                                            Description
    0000000000 000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a a
    9
10
10
10
10
US-09-925-065A-539147
US-10-301-480-42505
US-10-301-480-42505
US-10-301-480-42504
US-10-301-480-655913
US-10-301-480-655913
US-10-301-480-310231
US-10-301-480-310231
US-10-301-480-310232
US-10-301-480-310233
US-10-301-480-310233
US-10-301-480-310233
US-10-301-480-310233
US-10-301-480-310233
US-10-301-480-311233
US-10-301-4
Sequence 436208, Sequence 1911350, Sequence 225679, Sequence 39880, Sequence 39880, Sequence 2075573, Sequence 295573, Sequence 207983, Sequence 56514, Sequence 51029, Apple of the first of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 539147,
Sequence 539148,
Sequence 42504, A
Sequence 42505, A
Sequence 655913,
Sequence 655914,
Sequence 144381,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  238954,
852363,
310231,
310232,
923640,
923641,
```

0 0 0

161 162 163	C 160	158				C 151																C 133					C 128						122	121	120	119	118	c 117			114	113	112	111	0 110	109	108	C 107	106	c 105	104	103	102	101	100						c 95		
17 17 17	17	17	17	17 17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17		17				17			17	17	17	17	17	17	17	17	17	17	18	18				18													
												٠	•																•	٠	•	•		٠	٠	•	٠	•	•	•	•	٠		٠	2	N	N	N	٠	٠		٠	٠	٠	٠	•	•			•	•	٠	٠
0 0 0 0 0 0 0 0 4 4 4	596	593	590	590 590	590	7 58 B	588	J U	587	587	5 0 5 0 7 0 7 0	586	585	585	580	580	580	л U	576	77.7 27.7	573	570	л (0 (лi	л и л и	546	544	J1 (2	531	531	531	531	515	515	450	450	446	445	425	364	19	19	19	19	45761	145761	82303		43948	31737	4335	3945	3945	2902	2902	2399	2399	2000	2399	1474	1474	1474	1 1 1
911	ი ი	1.5	:::	11	۲,	'n	9	ש ש	, <u>;</u>	10	ካ ወ	n 01	6	6	۲:	= :	1 :		ָּלַ ע	- F	_ ,	א כ	א ע	ס ע	ס ע	ח פ	o د	ָּין ת	ĭ	Ħ	=	ä	6	σ	ĭ	7	0	σ	0	0	13	13	12	12	9	9	14	9	8	Ľ	8	9	9	11	11	6	. 0	n (م ا	ĭ	1	10	
US-10-301-480-428173 US-10-301-480-1041582 US-10-301-480-200261 US-10-301-480-200261	US-09-925-065A US-09-925-065A	US-10-301-480	US-10-301-480	US-10-301-480	US-10-301-480	US-10-301-480	US-10-301-480-	US-09-925-065A	US-10-301-480	US-10-301-480	US-09-925-065A	US-09-925-065A	US-09-925-065A	US-09-925-065A	US-10-301-480	US-10-301-480	US-10-301-480	115-10-301-480	4590-509-60-50 00#1705-01-00	IIS-10-301-480	IS-10-301-480	15-09-925-065A	13-09-925-065A	4290-250-60-60-5E	15-09-925-065A	18-09-925-065A	JS-09-925-065A	4590-506-60-SE	US-10-301-480	US-10-301-480	US-10-301-480	US-10-301-480	JS-09-925-065A	JS-09-925-065A	US-10-301-480	US-10-301-480	JS-09-925-065A	JS-09-925-065A	JS-09-925-065A	JS-09-925-065A	US-11-083-784	US-11-083-784	US-11-101-244	US-11-101-244	US-11-098-68	US-11-098-68	US-11-121-086	US-10-330-773-296	US-10-949-720-393	US-11-231-243-111	US-10-949-720-394	o	9	*	US-11-245-147-85	445	US-U9-925-U65A-/04455		4	776	US-10-301-480-777766	776	1
Sequence 428173, Sequence 1041582, Sequence 200261,	Sequence 256142, Sequence 158803,	Sequence 334886, Sequence 948295,	Sequence 931586,	Sequence 318177,	Sequence 251753,	Sequence 672169	equence	Sequence 392173,	Sequenc	Sequence	Sequence 606821,	equence	Sequence 138242,	Sequence 138241,	Sequence 1073752.	Segmence 1073751	Sequence 460343	Sequence 460342	Sequence 1143470,	sequence orreor,	Sequence 50007,	Semience 3249/1,	Semience Solver,	Sequence scooze,	sequence 945186,	compare 915186	Sequence 018572.	Semience RA9037	Sequence 1131322.	Sequence 1131321.	Sequence 517913.	Sequence 517912.	Sequence 460836,	Sequence 460835,	Sequence 954866.	Sequence 341457,	Sequence 263425,	Sequence 575133,	Sequence 890925,	Sequence 95723, A	Sequence 1456620,	Sequence 151967,	Sequence 1456620,	Sequence 151967,	Sequence 8739, Ap	Sequence 8739, Ap	Sequence 45, Appl	Sequence 296, App	Sequence 393, App	Sequence 111, App	Sequence 394, App	Sequence 82661, A	Sequence 82661, A	Sequence 224, App	Sequence 85, Appl	Sequence 704456,	sequence /04455,	Sociona 7011EE	Semience 704454	Sequence 777767.	Sequence 777766,	quence 77776	quence ////6
										_															_	_							_	_					_																								
			229		C 225		223		c 220		-	c 216	215	214	213		0 2 2 1 0			300	200	206) L	204	202	2 6		3 (197		c 195		c 193			c 190	189	188	187	186	185			c 182				c 178		176	c 175			172			C 170			c 167	
234 235 1 236 1	232 233 1	230 1 231 1	. ب	227 1	226 1	222	- -	221 1	220 1	219	217	216 1	1	н,	, ,		211	210	200	۰,	ـ ـ	205 17	ـ ـ	203 17		۔ ـ	200	300	199 1		197 17		195 1		193 1	192 1	191 1		_	-		_	185 17		183 1		181 1	180 1	179 1	178 1	177 1	_	175 1	174 1	173 1	_	171 1	1 2	170	169 1	168 1	167 1	TOO
234 17 3. 235 17 3. 236 17 3.	232 17 3. 233 17 3.	230 17 3. 231 17 3.	17 3.	227 17 3.	225 17 3.	224 17 3.	17 3.	221 17 3.	220 17 3.	219 17 3.	217 17 3.	216 17 3.	17 3.	17 3.	17 3.	212 17 3.	210 17 3.	210 17 3.	206 17 3.	17 3.	17 2.	17 3.	17	17	17 3.	17	200 17 3.	200 17 3	199 17 3.	198 17 3	17	196 17 3.	195 17 3.	194 17 3.	193 17 3.	192 17 3.	191 17 3.	190 17 3.	17 3.	17 3.	17 3.	17 3.	17 3.	184 17 3.	183 17 3.	182 17 3.	181 17 3.	180 17 3.	179 17 3.	178 17 3.	177 17 3.	17 3.	175 17 3.	174 17 3.	173 17 3.	17 3.	171 17 3.	131	170 17 3	169 17 3.	168 17 3.	167 17 3.	T00 T/ 3.
234 17 3.0 19 235 17 3.0 19 236 17 3.0 20	232 17 3.0 19 233 17 3.0 19	230 17 3.0 18 231 17 3.0 19	17 3.0 18	227 17 3.0 16	225 17 3.0 16 226 17 3.0 16	224 17 3.0 14	17 3.0 1	221 17 3.0 13	220 17 3.0 1	219 17 3.0 1	217 17 3.0 13	216 17 3.0 10	17 3.0	17 3.0	17 3.0	212 17 3.0	210 17 3.0	210 17 2.0	206 17 3.0 0	17 200	17 200	17 3.0	17 0.0	17 20 0	17 3.0	17 3.0	200 17 3.0	200 17 3.0	199 17 3.0	198 17 3.0	17 3.0	196 17 3.0	195 17 3.0 €	194 17 3.0	193 17 3.0	192 17 3.0	191 17 3.0	190 17 3.0	17 3.0	17 3.0 (17 3.0 6	17 3.0	17 3.0 6	184 17 3.0	183 17 3.0	182 17 3.0	181 17 3.0	180 17 3.0	179 17 3.0	178 17 3.0 6	177 17 3.0 6	17 3.0 6	175 17 3.0	174 17 3.0 (173 17 3.0	17 3.0	171 17 3.0	11 0.0	170 17 3 0	169 17 3.0	168 17 3.0	167 17 3.0 6	TOO T/ 2.0
234 17 3.0 1930 6 235 17 3.0 1930 6 236 17 3.0 2004 9	232 17 3.0 1930 6 233 17 3.0 1930 6	230 17 3.0 1880 10 231 17 3.0 1930 6	17 3.0 1880 9	227 17 3.0 1670 10 228 17 3.0 1880 6	225 17 3.0 1670 9 226 17 3.0 1670 9	224 17 3.0 1437 8	17 3.0 1437 8	221 17 3.0 1156 10	220 17 3.0 1156 1	219 17 3.0 1156 9	217 17 3.0 1104 6	216 17 3.0 1098 6	17 3.0 983 10	17 3.0 983 1	17 3.0 982 1	212 17 3.0 982 10	210 17 3.0 869 7	210 17 3.0 069 0	206 17 3.0 846 I	17 3.0 846 1	17 3.0 646 7	17 3.0 846 9	17 3.0 846 6	17 3.0 046 6	17 3.0 946 6	17 30 703 6	200 17 3.0 793 6	200 17 3.0 649 10	199 17 3.0 649 10	198 17 3.0 641 6	17 3.0 635 6	196 17 3.0 632 6	195 17 3.0 629 6	194 17 3.0 624 6	193 17 3.0 623 10	192 17 3.0 623 10	191 17 3.0 622 6	190 17 3.0 621 6	17 3.0 618 10	17 3.0 618 10	17 3.0 617 10	17 3.0 617 10	17 3.0 617 9	184 17 3.0 617 9	183 17 3.0 616 10	182 17 3.0 616 10	181 17 3.0 615 6	180 17 3.0 614 6	179 17 3.0 611 10	178 17 3.0 611 10	177 17 3.0 608 6	17 3.0 605 10	175 17 3.0 605 10	174 17 3.0 605 10	173 17 3.0 605 10	17 3.0 605 10	171 17 3.0 605 9	131 3.0 000 9	170 17 3.0 605 9	169 17 3.0 605 9	168 17 3.0 605 6	167 17 3.0 605 6	100 L/ 3.0 605 6
234 17 3.0 1930 6 US-09-925-065A-692 235 17 3.0 1930 6 US-09-925-065A-692 236 17 3.0 2004 9 US-10-932-182A-755	232 17 3.0 1930 6 US-09-925-065A-69291 233 17 3.0 1930 6 US-09-925-065A-69291	230 17 3.0 1880 10 US-10-301-480-80839 231 17 3.0 1930 6 US-09-925-065A-69291	17 3.0 1880 9 US-10-301-480-194987	227 17 3.0 1670 10 US-10-301-480-748	226	224 17 3.0 1437 8 US-10-750-623-5848	17 3.0 1437 8 US-10-750-185-58488	221 17 3.0 1156 10 US-10-301-480-645	220 17 3.0 1156 10 US-10-301-480-64598	219 17 3.0 1156 9 US-10-301-480-3257	217 17 3.0 1104 6 US-09-925-065A-68	216 17 3.0 1098 6 US-09-925-065A-278	17 3.0 983 10 US-10-301-480-11	17 3.0 983 10 US-10-301-480-58	17 3.0 982 10 US-10-301-480-11	212 17 3.0 669 tV US-10-301-480-73	210 17 3.0 869 9 05-10-301-480-1201 211 17 3.0 869 9 05-10-301-480-1201	210 17 3.0 009 0 US-US-321-400-130	200 17 3.0 060 6 TC-00-02E-06EX-10	17 3.0 046 10 US-10-301-480-80	17 3.0 646 3 03-10-301-480-130	17 3.0 846 9 US-10-301-480-195	17 3.0 046 6 US-US-361-460-105.	17 3.0 046 6 US-09-925-065X-94	17 3.0 /93 6 US-09-925-065A-94	17 3.0 703 6 TS 00-03E-04E3-04E	200 17 3.0 849 10 05-10-301-480-11.	200 17 3.0 649 10 175-10-301-480-111	199 17 3.0 649 10 US-10-301-480-51	198 17 3.0 641 6 US-09-925-065A-45	17 3.0 635 6 15-09-925-0654-981	196 17 3.0 632 6 US-09-925-065A-77	195 17 3.0 629 6 US-09-925-065A-17	194 17 3.0 624 6 US-09-925-065A-81	193 17 3.0 623 10 US-10-301-480-10	192 17 3.0 623 10 US-10-301-480-46	191 17 3.0 622 6 US-09-925-065A-49	190 17 3.0 621 6 US-09-925-065A-82	17 3.0 618 10 US-10-301-480-90	17 3.0 618 10 US-10-301-480-28	17 3.0 617 10 US-10-301-480-67	17 3.0 617 10 US-10-301-480-67	17 3.0 617 9 US-10-301-480-638	184 17 3.0 617 9 US-10-301-480-638	183 17 3.0 616 10 US-10-301-480-87	182 17 3.0 616 10 US-10-301-480-26	181 17 3.0 615 6 US-09-925-065A-40	180 17 3.0 614 6 US-09-925-065A-19	179 17 3.0 611 10 US-10-301-480-88	178 17 3.0 611 10 US-10-301-480-27	177 17 3.0 608 6 US-09-925-065A-18	17 3.0 605 10 US-10-301-480-12	175 17 3.0 605 10 US-10-301-480-72	174 17 3.0 605 10 US-10-301-480-72	173 17 3.0 605 10 US-10-301-480-72	17 3.0 605 10 US-10-301-480-60	171 17 3.0 605 9 US-10-301-480-114	131 17 3.0 605 9 05-10-301-400-114	170 17 3 0 605 0 MS_10_301_480_114	169 17 3.0 605 9 US-10-301-480-114	168 17 3.0 605 6 US-09-925-065A-99	167 17 3.0 605 6 US-09-925-065A-13	166 17 3.0 605 6 US-09-925-065A-13
7 3.0 1930 6 US-09-925-065A-692914 Sequenc 7 3.0 1930 6 US-09-925-065A-692915 Sequenc 7 3.0 2004 9 US-10-932-182A-75539 Sequenc 7 3.0 2004 9 US-10-932-182A-75539 Sequence	232 17 3.0 1930 6 US-09-925-065A-692912 Sequence 233 17 3.0 1930 6 US-09-925-065A-692913 Sequence	230 17 3.0 1880 10 US-10-301-480-808396 Sequence 231 17 3.0 1930 6 US-09-925-065A-692911 Sequence	17 3.0 1880 9 US-10-301-480-194987 Sequence	227 17 3.0 1670 10 US-10-301-480-748854 Sequence	226 17 3.0 1670 9 US-10-301-480-135445 Segmence	224 17 3.0 1437 8 US-10-750-623-58488 Sequence	17 3.0 1437 8 US-10-750-185-58488 Sequence	221 17 3.0 1156 10 US-10-301-480-645986 Sequence	220 17 3.0 1156 10 US-10-301-480-645985 Sequenc	219 17 3.0 1156 9 US-10-301-480-32577 Sequence	217 17 3.0 1104 6 US-09-925-065A-680915 Sequence	216 17 3.0 1098 6 US-09-925-065A-278552 Sequence	17 3.0 983 10 US-10-301-480-1196200 Sequence	17 3.0 983 10 US-10-301-480-582791 Sequence	17 3.0 982 10 US-10-301-480-1191191 Sequence	212 17 3.0 982 10 IIS-10-301-480-577782 Sequence	210 17 3.0 869 3 05-10-301-480-733567 Sequence	200 17 2.0 000 0 176-10-201-401-10120 6-00-00-00-00-00-00-00-00-00-00-00-00-00	200 17 3.0 050 6 TC-00-00E-0583-10001 Sequence	17 3.0 046 10 US-10-301-480-809040 Segment	20000000000000000000000000000000000000	17 3.0 846 9 US-10-301-480-195631 Seguence	17 3 0 646 6 US-10-301-105-20 6 650 9 650 12 12 12 12 12 12 12 12 12 12 12 12 12	0.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	17 3.0 946 6 TG 00-035-065A-941999 Segmence	17 3 0 103 003 003 003 003 003 003 003 003	200 17 3.0 545 to 05-10-301-460-1143603 Sequence	200 17 3 0 649 10 TG-10-201-480-1125603 Seguence	199 17 3 0 649 10 US-10-301-480-512194 Segment	198 17 3.0 641 6 US-09-925-0658-453509 Segmence	17 3.0 635 6 IIS-09-925-065A-98887 Semience	196 17 3.0 632 6 US-09-925-065A-778876 Sequence	195 17 3.0 629 6 US-09-925-065A-175020 Sequence	194 17 3.0 624 6 US-09-925-065A-812538 Sequence	193 17 3.0 623 10 US-10-301-480-1080871 Sequence	192 17 3.0 623 10 US-10-301-480-467462 Sequenc	191 17 3.0 622 6 US-09-925-065A-495966 Sequence	190 17 3.0 621 6 US-09-925-065A-822912 Sequence	17 3.0 618 10 US-10-301-480-900218 Sequenc	17 3.0 618 10 US-10-301-480-286809 Sequenc	17 3.0 617 10 US-10-301-480-677223 Sequenc	17 3.0 617 10 US-10-301-480-677222 Sequenc	17 3.0 617 9 US-10-301-480-63814 Sequence	184 17 3.0 617 9 US-10-301-480-63813 Sequence	183 17 3.0 616 10 US-10-301-480-879799 Sequenc	182 17 3.0 616 10 US-10-301-480-266390 Sequenc	181 17 3.0 615 6 US-09-925-065A-400124 Sequence	180 17 3.0 614 6 US-09-925-065A-197924 Sequence	179 17 3.0 611 10 US-10-301-480-887095 Sequence	178 17 3.0 611 10 US-10-301-480-273686 Sequence	177 17 3.0 608 6 US-09-925-065A-183265 Sequence	17 3.0 605 10 US-10-301-480-1216196 Sequence	175 17 3.0 605 10 US-10-301-480-728114 Sequenc	174 17 3.0 605 10 US-10-301-480-728113 Sequenc	173 17 3.0 605 10 US-10-301-480-728112 Sequenc	17 3.0 605 10 US-10-301-480-602787 Sequenc	171 17 3.0 605 9 US-10-301-480-114705 Sequence	17 17 17 17 17 17 17 17 17 17 17 17 17 1	170 17 3 0 606 0 HS-10-201-480-114704 Semiente	169 17 3.0 605 9 US-10-301-480-114703 Semience	168 17 3.0 605 6 US-09-925-065A-99564 Sequence	167 17 3.0 605 6 US-09-925-065A-13468 Sequence 13	166 17 3.0 605 6 US-09-925-065A-13467 Sequence 13

.

				a) N) N		v N i		งผ			a (-	งผเ	y N 1	O.	~ ~	ററ	0 0				0 0		0 0		იი			0.0	0			a	
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		c 300	N1 N1 N	296	9 9	92	9 6	88	86	284	282	281	279	77	7 77 .	273	N) N)	N) N)				N3 N3		257 258	256	25.5		251	249	248					240
11111	166	166	166	, H F	16	16	166	166	16	16	17 16	17	17	17	17	17	17 17	17 17	17 17	17 17	17 17	17	17 17	17 17	17	17	17 17	17	17	17	117	17	17	17	17
,,,,,,																		ω ω :	ω ω · ·	ωω	ω ω	ω ω (ω	ωω	ب ب	υ (0)	ωω	ωú		ωι	υωι	ωω	ωu	ω.	ωu
											יו	<u></u>																							
347 347 347 348																																			
10 US 10 US 10 US																																			
US-10-301-4 US-10-301-4 US-10-301-4 US-10-301-4 US-10-301-4 US-09-925-06	-11-1	10-99	-11-0 -11-0	-11-1	-11-1	10-93	-11-0	-11-0	-11-1	-11-1 -11-1	-11-1 -11-1	-11-1	1111	-11-0	10-75	10-75	-10-3 10-75	-10-3	-10-3 -10-3	-10-3 -10-3	10-30 10-30	10-30	10-30	09-92 10-30	09-92	09-92	09-92	09-92	-10-3	-10-3	10-30	10-30	09-92	09-92	-10-30
01-48 01-48 01-48 01-48	24-36 01-48 01-48	5-561	75-85 98-68 5-561	21-84	21-84	2-182	83-78	83-78 83-78	01-24	01-24 01-24	14-79	21-08	28-04	11-33	0-623	0-623 0-185	01-48 0-185	01-48 01-48	01-48 01-48	01-48 01-48	1-480 1-480	1-480 1-480	1-480	5-065 1-480	5-065	5-065	5-065	5-065	01-48	01-48 01-48	1-480	1-480 1-480	5-065	Uπo	œ C
-480-26922 -480-88263 -480-88263 -480-88263	7A-916 0-2692 0-2692	-63934 3A-111	-4395 -37746	9-7132	9-7132	1-8912	1-1456	1-4136	1-1456	1-4139 1-4139	9-47 1-4136	5-70	9-815	2A-94	-56760	-55057)-7603 -55057)-716599)-716600)-7165)-7165)-7165)-7165	-10319 -14689	-10318 -10318	-10318	ላ-4566 -10318	1-1954 1-1954	A-1952	1-1950 1-1951	1-0654	7920	0-7920	17862	-17862 -17862	A-7738		
035 4 04	26	82	u.	24	00	0.00	605	ίωσ	605	ōω	ŬΪ						80	009	97	96	تر ق	ōūċ	B 7	<u>8 1</u>				4	ω (A. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	33		سَا ∡ة	6.0	4 0	'n.
Sed Sed Sed Sed Sed	Sec.	Sequ	Sec.	Sec	Sequ	bas pas	Sec	S 80 80 80 80 80 80 80 80 80 80 80 80 80	Sec	Sec	Sec	Sec	s e c	0 0 0 0 0 0	thes These	These	Segn	s e s	sec.	sec Sec	Seq	Seq.	seq.	Seqn Seqn	Seq	ged Sedi	seq.	Sequ	Sec	9 S	Sequ	Seq	Seque	Sequ	Sec Desc
Sequence Sequence Sequence Sequence	nence prence	nence	nence prence	nence prence	nence	ence	nence	nence	nence	nence	nence pence	nence	nence Juence	nence	lence	ence	ence Pence	nence	nence	nence	ence	ence	ence	ence	ence	ence	ence	lence	Sequence	nence	ience	lence	lence	nce	2 6
2692 8826 8826 8826	2692 2692	1118	8882 4395 37746	2042	7132	89126	145	444	145	413	47,	70,	818	94	5676	55057	760	716	716	716	10319	10318	10318	45661 10318	1954,	1952,	1950,	949,	7920	7920	7862	7862	7385	77384	7800
20000	22	י יט	, s, Ap	24,		 D :	, 60,	1 00 01	505	שינים מינים	5 pg	ddy	A d	day) 	» » :	, 8 A	99,	97	8,5	φ,-	99,	۵,7	, , ,	ď,	Q A			4,	3 2	, ,	•	D D	a	on ~
34, 35, 4,	Ap	A	· σ >	· A	» ·		* *	- G					יסיסי) P F																					
	••	₽	ם סי		P C	c		a	10	ი ი	n	0.0	o 0			. n			340	C 338	336		332	a			C 325						c 315		n (
378 1 379 1 380 1 381 1 382 1	9 375 1 376 1 377 1	A 374 1	9 370 1 9 371 1 6 372 1	368 1 369 1	A 367 1	C 365 1	363	C 360 1	G 359	c 357 1 c 358 1	c 355 1	C 354 1	C 352	350	C 348	C 346 1	344 1 345 1	342 1	, بر د	338	ا دسو دسا	3 3 4 C	332	c 330 1 331 1	328	327	325	324 1	322	320 321 1	319	317 1	315 1 316 1	314	C 312 1
378 16 2. 379 16 2. 380 16 2. 381 16 2. 382 16 2.	9 375 16 2. 376 16 2. 377 16 2.	373 16 2. 374 16 2.	P 370 16 2. P 371 16 2.	368 16 2. 369 16 2.	C 366 16 2. A 367 16 2.	C 365 16 2.	363 16 2.	c 360 16 2.	C 359 16 2.	c 357 16 2. c 358 16 2.	c 355 16 2.	C 354 16 2.	C 352 16 2.	350 16 2.	C 348 16 2.	C 346 16 2.	344 16 2. 345 16 2.	342 16 2.	166 2.	338 16 2. 339 16 2.	166 2.	334 16 2.	332 16 2.	c 330 16 2. 331 16 2.	328 16 2. 329 16 2.	327 16 2.	325 16 2.	324 16 2.	322 16 2.	320 16 2. 321 16 2.	319 16 2.	317 16 2.	315 16 2. 316 16 2.	314 16 2.	C 313 16 2.
378 16 2.9 379 16 2.9 380 16 2.9 381 16 2.9 382 16 2.9	375 16 2.9 376 16 2.9 377 16 2.9	373 16 2.9 374 16 2.9 A 374 16 2.9	P 370 16 2.9 271 16 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9 2.9	368 16 2.9 369 16 2.9	R 367 16 2.9	C 365 16 2.9	363 16 2.9	C 360 16 2.9 361 16 2.9	C 359 16 2.9	C 357 16 2.9 C 358 16 2.9	356 16 2.9	C 354 16 2.9	C 352 16 2.9	350 16 2.9	C 348 16 2.9	C 345 16 2.9	344 16 2.9 345 16 2.9	342 16 2.9 343 16 2.9	16 2.9	338 16 2.9 339 16 2.9	16 2.9	334 16 2.9	332 16 2.9	C 330 16 2.9 331 16 2.9	328 16 2.9 329 16 2.9	327 16 2.9	325 16 2.9	324 16 2.9 324 16 2.9	322 16 2.9	320 16 2.9 321 16 2.9	319 16 2.9	317 16 2.9	315 16 2.9 316 16 2.9	314 16 2.9 314 16 2.9	C 312 16 2.9
378 16 2.9 515 10 379 16 2.9 515 10 380 16 2.9 516 6 381 16 2.9 516 6 382 16 2.9 516 10	P 375 16 2.9 515 9 515 9 515 9	373 16 2.9 506 10 8 374 16 2.9 506 10	P 370 16 2.9 500 16 2 371 16 2.9 504 6 2 372 16 2 9 505 6	368 16 2.9 500 10 369 16 2.9 500 10	C 366 16 2.9 499 6 A 367 16 2.9 500 10	C 365 16 2.9 499 6	362 16 2.9 499 6 363 16 2.9 499 6	C 360 16 2.9 498 10	C 359 16 2.9 498 10	C 357 16 2.9 498 10 C 358 16 2.9 498 10	356 16 2.9 498 6 356 16 2.9 498 6	C 354 16 2.9 496 10	C 352 16 2.9 493 0	350 16 2.9 493 6	C 348 16 2.9 485 1	C 346 16 2.9 482 6	344 16 2.9 479 10 345 16 2.9 479 10	342 16 2.9 473 10 343 16 2.9 475 6	16 2.9 473 10 16 2.9 473 10	338 16 2.9 472 6 339 16 2.9 473 10	16 2.9 468 6 16 2.9 468 6	334 16 2.9 467 1. 335 16 2.9 467 1.	332 16 2.9 465 6	C 330 16 2.9 450 10 331 16 2.9 454 6	328 16 2.9 425 10 329 16 2.9 450 9	327 16 2.9 425 9	325 16 2.9 412 10 326 16 2.9 412 10	323 16 2.9 408 6 324 16 2.9 408 6	322 16 2.9 408 6	320 16 2.9 398 6 321 16 2.9 404 6	319 16 2.9 397 6	317 16 2.9 376 1:	315 16 2.9 368 10 316 16 2.9 368 10	314 16 2.9 368 6	C 312 16 2.9 368 6
378 16 2.9 515 10 379 16 2.9 515 10 380 16 2.9 516 6 381 16 2.9 516 6 382 16 2.9 516 10	P 375 16 2.9 515 9 515 9 515 9	373 16 2.9 506 10 8 374 16 2.9 506 10	P 370 16 2.9 500 16 2 371 16 2.9 504 6 2 372 16 2 9 505 6	368 16 2.9 500 10 369 16 2.9 500 10	C 366 16 2.9 499 6 A 367 16 2.9 500 10	C 365 16 2.9 499 6	362 16 2.9 499 6 363 16 2.9 499 6	C 360 16 2.9 498 10	C 359 16 2.9 498 10	C 357 16 2.9 498 10 C 358 16 2.9 498 10	356 16 2.9 498 6 356 16 2.9 498 6	C 354 16 2.9 496 10	C 352 16 2.9 493 0	350 16 2.9 493 6	C 348 16 2.9 485 1	C 346 16 2.9 482 6	344 16 2.9 479 10 345 16 2.9 479 10	342 16 2.9 473 10 343 16 2.9 475 6	16 2.9 473 10 16 2.9 473 10	338 16 2.9 472 6 339 16 2.9 473 10	16 2.9 468 6 16 2.9 468 6	334 16 2.9 467 1. 335 16 2.9 467 1.	332 16 2.9 465 6	C 330 16 2.9 450 10 331 16 2.9 454 6	328 16 2.9 425 10 329 16 2.9 450 9	327 16 2.9 425 9	325 16 2.9 412 10 326 16 2.9 412 10	323 16 2.9 408 6 324 16 2.9 408 6	322 16 2.9 408 6	320 16 2.9 398 6 321 16 2.9 404 6	319 16 2.9 397 6	317 16 2.9 376 1:	315 16 2.9 368 10 316 16 2.9 368 10	314 16 2.9 368 6	C 312 16 2.9 348 6
378 16 2.9 515 10 379 16 2.9 515 10 380 16 2.9 516 6 381 16 2.9 516 6 382 16 2.9 516 10	P 375 16 2.9 515 9 515 9 515 9	373 16 2.9 506 10 8 374 16 2.9 506 10	P 370 16 2.9 500 16 2 371 16 2.9 504 6 2 372 16 2 9 505 6	368 16 2.9 500 10 369 16 2.9 500 10	C 366 16 2.9 499 6 A 367 16 2.9 500 10	C 365 16 2.9 499 6	362 16 2.9 499 6 363 16 2.9 499 6	C 360 16 2.9 498 10	C 359 16 2.9 498 10	C 357 16 2.9 498 10 C 358 16 2.9 498 10	356 16 2.9 498 6 356 16 2.9 498 6	C 354 16 2.9 496 10	C 352 16 2.9 493 0	350 16 2.9 493 6	C 348 16 2.9 485 1	C 346 16 2.9 482 6	344 16 2.9 479 10 345 16 2.9 479 10	342 16 2.9 473 10 343 16 2.9 475 6	16 2.9 473 10 16 2.9 473 10	338 16 2.9 472 6 339 16 2.9 473 10	16 2.9 468 6 16 2.9 468 6	334 16 2.9 467 1. 335 16 2.9 467 1.	332 16 2.9 465 6	C 330 16 2.9 450 10 331 16 2.9 454 6	328 16 2.9 425 10 329 16 2.9 450 9	327 16 2.9 425 9	325 16 2.9 412 10 326 16 2.9 412 10	323 16 2.9 408 6 324 16 2.9 408 6	322 16 2.9 408 6	320 16 2.9 398 6 321 16 2.9 404 6	319 16 2.9 397 6	317 16 2.9 376 1:	315 16 2.9 368 10 316 16 2.9 368 10	314 16 2.9 368 6	C 312 16 2.9 348 6
378 16 2.9 515 10 379 16 2.9 515 10 380 16 2.9 516 6 381 16 2.9 516 6 382 16 2.9 516 10	p 375 16 2.9 510 6 US-09-925-065A-34 376 16 2.9 515 9 US-10-301-480-662 377 16 2.9 515 9 US-10-301-480-662	373 16 2.9 506 10 US-10-301-480-40 A 374 16 2.9 506 10 US-10-301-480-10	p 370 16 2.9 500 10 US-10-301-480-11 p 371 16 2.9 504 6 US-09-925-0658-27 C 372 16 2.9 505 6 US-09-925-0658-27	368 16 2.9 500 10 US-10-301-480-46 369 16 2.9 500 10 US-10-301-480-10	C 366 16 2.9 499 6 US-09-925-065A-83	C 365 16 2.9 499 6 US-09-925-065A-83	362 16 2.9 499 6 US-09-925-065A-10	C 360 16 2.9 498 10 US-10-301-480-98	c 359 16 2.9 498 10 US-10-301-480-91	c 357 16 2.9 498 10 US-10-301-480-30 c 358 16 2.9 498 10 US-10-301-480-37	c 355 16 2.9 498 6 US-09-925-065A-21	C 354 16 2.9 496 10 US-10-301-480-10	C 352 16 2.9 495 6 US-US-US-05-065A-4	350 16 2.9 493 6 US-09-925-06SA-42	C 348 16 2.9 405 10 US-10-301-4800-22	C 346 16 2.9 482 6 US-09-925-065A-15	344 16 2.9 479 10 US-10-301-480-41	342 16 2.9 473 10 US-10-301-480-88	16 2.9 473 10 US-10-301-480-26	338 16 2.9 472 6 US-09-925-065A-26 339 16 2.9 473 10 US-10-301-480-26	16 2.9 468 6 US-09-925-065A-17	335 16 2.9 467 14 US-11-136-527-33 335 16 2.9 467 14 US-11-136-527-73	332 16 2.9 465 6 US-09-925-065A-73	c 330 16 2.9 450 10 US-10-301-480-61	328 16 2.9 425 10 329 16 2.9 450 9	327 16 2.9 425 9	325 16 2.9 412 10 326 16 2.9 412 10	323 16 2.9 408 6 324 16 2.9 408 6	322 16 2.9 408 6	320 16 2.9 398 6 321 16 2.9 404 6	319 16 2.9 397 6	317 16 2.9 376 1:	315 16 2.9 368 10 316 16 2.9 368 10	314 16 2.9 368 6	C 312 16 2.9 368 6
378 16 2.9 515 379 16 2.9 515 380 16 2.9 516 381 16 2.9 516 382 16 2.9 516	p 375 16 2.9 510 6 US-09-925-065A-34 376 16 2.9 515 9 US-10-301-480-662 377 16 2.9 515 9 US-10-301-480-662	373 16 2.9 506 10 8 374 16 2.9 506 10	p 370 16 2.9 500 10 US-10-301-480-11 p 371 16 2.9 504 6 US-09-925-0658-27 C 372 16 2.9 505 6 US-09-925-0658-27	368 16 2.9 500 10 US-10-301-480-46 369 16 2.9 500 10 US-10-301-480-10	C 366 16 2.9 499 6 US-09-925-065A-83	C 365 16 2.9 499 6 US-09-925-065A-83	362 16 2.9 499 6 US-09-925-065A-10	C 360 16 2.9 498 10 US-10-301-480-98	c 359 16 2.9 498 10 US-10-301-480-91	c 357 16 2.9 498 10 US-10-301-480-30 c 358 16 2.9 498 10 US-10-301-480-37	c 355 16 2.9 498 6 US-09-925-065A-21	C 354 16 2.9 496 10 US-10-301-480-10	C 352 16 2.9 496 6 US-US-925-065A-4	350 16 2.9 493 6 US-09-925-06SA-42	C 348 16 2.9 405 10 US-10-301-4800-22	C 346 16 2.9 482 6 US-09-925-065A-15	344 16 2.9 479 10 US-10-301-480-41	342 16 2.9 473 10 US-10-301-480-88	16 2.9 473 10 US-10-301-480-26	338 16 2.9 472 6 US-09-925-065A-26 339 16 2.9 473 10 US-10-301-480-26	16 2.9 468 6 US-09-925-065A-17	335 16 2.9 467 14 US-11-136-527-33 335 16 2.9 467 14 US-11-136-527-73	332 16 2.9 465 6 US-09-925-065A-73	c 330 16 2.9 450 10 US-10-301-480-61	328 16 2.9 425 10 329 16 2.9 450 9	327 16 2.9 425 9 US-10-301-480-3015	325 16 2.9 412 10 US-10-301-480-489561	324 16 2.9 408 6 US-09-925-065A-4976	322 16 2.9 408 6 US-09-925-065A-49760	320 16 2.9 398 6 US-09-925-065A-8559	319 16 2.9 397 6 US-09-925-065A-8459	317 16 2.9 376 11 US-11-021-492-480	315 16 2.9 368 10 US-10-301-480-2692 316 16 2.9 368 10 US-10-301-480-8826	314 16 2.9 368 6 US-09-925-065A-57858	2 3 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
378 16 2.9 515 10 US-10-301-480-679619 S 379 16 2.9 515 10 US-10-301-480-679620 S 380 16 2.9 516 6 US-09-925-065A-578576 Se 381 16 2.9 516 6 US-09-925-065A-578576 Se 382 16 2.9 516 10 US-10-301-480-417291 S	p 375 16 2.9 510 6 US-09-925-065A-344810 Se 376 16 2.9 515 9 US-10-301-480-66210 Se 377 16 2.9 515 9 US-10-301-480-66211 Se	373 16 2.9 506 10 US-10-301-480-466916 S 374 16 2.9 506 10 US-10-301-480-1080325 S	P 370 16 2.9 500 10 US-10-301-480-1081076 S D 371 16 2.9 504 6 US-09-925-065A-571757 Se C 372 16 2.9 505 6 US-09-925-065A-204672 Se	A 368 16 2.9 500 10 US-10-301-480-467667 369 16 2.9 500 10 US-10-301-480-1081075	C 366 16 2.9 499 6 US-09-925-065A-836344 8	C 365 16 2.9 499 6 US-09-925-065A-836343 (363 16 2.9 499 6 US-09-925-065A-108241 363 16 2.9 499 6 US-09-925-065A-108242	C 360 16 2.9 498 10 US-10-301-480-985417	C 359 16 2.9 498 10 US-10-301-480-916302	c 357 16 2.9 498 10 US-10-301-480-302893 c 358 16 2.9 498 10 US-10-301-480-372008	c 355 16 2.9 498 6 US-09-925-065A-216435 356 16 2.9 498 6 US-09-925-065A-766117	C 353 16 2.9 496 10 US-10-301-480-4/49/5	C 352 16 2.9 496 6 US-US-952-065A-408434	350 16 2.9 493 6 US-09-925-065A-477307	C 348 16 2.9 485 10 US-10-301-480-839649 C 348 16 2.9 485 10 US-10-301-480-848058	C 346 16 2.9 482 6 US-09-925-0658-139580	344 16 2.9 479 10 US-10-301-480-415164	342 16 2.9 473 10 US-10-301-480-882470	16 2.9 473 10 US-10-301-480-269061	338 16 2.9 472 6 US-09-925-065A-268530 339 16 2.9 473 10 US-10-301-480-269060	16 2.9 468 6 US-09-925-065A-178016	334 16 2.9 467 14 US-11-136-527-3340 335 16 2.9 467 14 US-11-136-527-7336	332 16 2.9 465 6 US-09-925-065A-737902	c 330 16 2.9 450 10 US-10-301-480-615298 331 16 2.9 454 6 US-09-925-065A-575088	328 16 2.9 425 10 US-10-301-480-616424 329 16 2.9 450 9 US-10-301-480-1889	327 16 2.9 425 10 US-10-301-480-3015	325 16 2.9 412 10 US-10-301-480-489561	324 16 2.9 408 6 US-09-925-065A-497601	322 16 2.9 408 6 US-09-925-065A-497600	320 16 2.9 398 6 US-09-925-065A-855967 321 16 2.9 404 6 US-09-925-065A-425922	319 16 2.9 397 6 US-09-925-065A-845905	317 16 2.9 376 11 US-11-021-492-480	315 16 2.9 368 10 US-10-301-480-269228 S	314 16 2.9 368 6 US-09-925-065A-578585 Se	C 312
378 16 2.9 515 10 US-10-301-480-679619 Se 379 16 2.9 515 10 US-10-301-480-679620 Se 380 16 2.9 516 6 US-09-925-065A-399558 Sec 381 16 2.9 516 6 US-09-925-065A-578576 Sec 382 16 2.9 516 10 US-10-301-480-417291 Se	p 375 16 2.9 510 6 US-09-925-065A-344810 Sequenc 376 16 2.9 515 9 US-10-301-480-66210 Sequenc 377 16 2.9 515 9 US-10-301-480-66211 Sequenc	373 16 2.9 506 10 US-10-301-480-466916 Sequen A 374 16 2.9 506 10 US-10-301-480-1080325 Sequen	p 370 16 2.9 500 10 US-10-301-480-1081076 86 2.9 504 6 US-09-925-065A-571757 Sec 6 372 16 2.9 505 6 US-09-925-065A-204672 Sec	A 368 16 2.9 500 10 US-10-301-480-467667 Se 369 16 2.9 500 10 US-10-301-480-1081075 Se	c 366 16 2.9 499 6 US-09-925-065A-836344 Sec A 367 16 2.9 500 10 US-10-301-480-467666 Se	c 365 16 2.9 499 6 US-09-925-065A-836343 Sequence	363 16 2.9 499 6 US-09-925-065A-108241 363 16 2.9 499 6 US-09-925-065A-108242	C 360 16 2.9 498 10 US-10-301-480-985417	C 359 16 2.9 498 10 US-10-301-480-916302	c 357 16 2.9 498 10 US-10-301-480-302893 c 358 16 2.9 498 10 US-10-301-480-372008	c 355 16 2.9 498 6 US-09-925-065A-216435 356 16 2.9 498 6 US-09-925-065A-766117	c 353 16 2.9 496 10 US-10-301-480-474975 Sequen	C 352 16 2.9 496 6 US-09-925-065A-40434 Sequence	350 16 2.9 403 6 US-09-925-065A-477307 Sequence 350 16 2.9 403 6 US-09-925-065A-477307 Sequence	C 348 16 2.9 405 10 US-10-301-480-848058 Sequent	C 346 16 2.9 482 6 US-09-925-0658-139580 Sequence	344 16 2.9 479 10 US-10-301-480-415164 Sequen	342 16 2.9 473 10 US-10-301-480-882470 Sequent	16 2.9 473 10 US-10-301-480-269061 Sequen 16 2.9 473 10 US-10-301-480-882469 Sequen	338 16 2.9 472 6 US-09-925-065A-268530 Sequenc 339 16 2.9 473 10 US-10-301-480-269060 Sequenc	16 2.9 468 6 US-09-925-065A-178016 Sequence	334 16 2.9 467 14 US-11-136-527-3340 Sequent	332 16 2.9 465 6 US-09-925-065A-737902 Sequence	c 330 16 2.9 450 10 US-10-301-480-615298 Sequenc	328	327 16 2.9 425 9 US-10-301-480-3015 Sequenc	325 16 2.9 412 10 US-10-301-480-489561 Sequen	324 16 2.9 408 6 US-09-925-065A-497601 Sequenc	322 16 2.9 408 6 US-09-925-065A-497600 Sequenc	320 16 2.9 398 6 US-09-925-065A-855967 Sequenc	319 16 2.9 397 6 US-09-925-065A-845905 Sequence	317 16 2.9 376 11 US-11-021-492-480 Sequen	315 16 2.9 368 10 US-10-301-480-269228 Sequen 316 16 2.9 368 10 US-10-301-480-882637 Sequen	314 16 2.9 368 6 US-09-925-065A-578585 Sequence	Description of the control of the co
378 16 2.9 515 10 US-10-301-480-679619 Sequence 6 379 16 2.9 515 10 US-10-301-480-679620 Sequence 6 380 16 2.9 516 6 US-09-925-065A-399558 Sequence 57 381 16 2.9 516 6 US-09-925-065A-578576 Sequence 57 382 16 2.9 516 10 US-10-301-480-417291 Sequence 4	p 375 16 2.9 510 6 US-09-925-065A-344810 Sequence 3446 376 16 2.9 515 9 US-10-301-480-66210 Sequence 6621 377 16 2.9 515 9 US-10-301-480-66211 Sequence 6621	373 16 2.9 506 10 US-10-301-480-466916 Sequence 1	p 370 16 2.9 500 10 US-10-301-480-1081076 Sequence 108 p 504 6 US-09-925-065A-571757 Sequence 5016 p 6 372 16 2.9 505 6 US-09-925-065A-2704672 Sequence 2016	A 368 16 2.9 500 10 US-10-301-480-467667 Sequence 467	c 366 16 2.9 499 6 US-09-925-065A-836344 Sequence 8363 A 367 16 2.9 500 10 US-10-301-480-467666 Sequence 467	c 365 16 2.9 499 6 US-09-925-065A-836343 Sequence 8363	363 16 2.9 499 6 US-09-925-065A-108242 Sequence 108	c 360 16 2.9 498 10 US-10-301-480-985417 Sequence 988	c 359 16 2.9 498 10 US-10-301-480-916302 Sequence 916	c 357 16 2.9 498 10 US-10-301-480-302893 Sequence 303	c 355 16 2.9 498 6 US-09-925-065A-216435 Sequence 2164 356 16 2.9 498 6 US-09-925-065A-766117 Sequence 7661	c 353 16 2.9 496 10 US-10-301-480-474975 Sequen	C 352 16 2.9 496 6 US-09-925-065A-40434 Sequence	350 16 2.9 403 6 US-09-925-065A-477307 Sequence 350 16 2.9 403 6 US-09-925-065A-477307 Sequence	C 348 16 2.9 405 10 US-10-301-480-848058 Sequent	C 346 16 2.9 482 6 US-09-925-0658-139580 Sequence	344 16 2.9 479 10 US-10-301-480-415164 Sequen	342 16 2.9 473 10 US-10-301-480-882470	16 2.9 473 10 US-10-301-480-269061 Sequen 16 2.9 473 10 US-10-301-480-882469 Sequen	338 16 2.9 472 6 US-09-925-065A-268530 Sequenc 339 16 2.9 473 10 US-10-301-480-269060 Sequenc	16 2.9 468 6 US-09-925-065A-178016 Sequence	334 16 2.9 467 14 US-11-136-527-3340 Sequent	332 16 2.9 465 6 US-09-925-065A-737902 Sequence	c 330 16 2.9 450 10 US-10-301-480-615298 Sequenc	328	327 16 2.9 425 9 US-10-301-480-3015 Sequenc	325 16 2.9 412 10 US-10-301-480-489561 Sequen	324 16 2.9 408 6 US-09-925-065A-497601 Sequenc	322 16 2.9 408 6 US-09-925-065A-497600 Sequenc	320 16 2.9 398 6 US-09-925-065A-855967 Sequenc	319 16 2.9 397 6 US-09-925-065A-845905 Sequence	317 16 2.9 376 11 US-11-021-492-480 Sequen	315 16 2.9 368 10 US-10-301-480-269228 Sequen 316 16 2.9 368 10 US-10-301-480-882637 Sequen	314 16 2.9 368 6 US-09-925-065A-578585 Sequence 57	2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2

4 0 0 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	C 451	449 450	44	C 445	C 443	4.4	440 441	439	438	4.3	43	c 433	e e	4 4	44	4.6	4.	4 2	423	42	4.2	4.4	41	44	C 414	4.4	411	409	407 408	406		C 403	401	400	0 0 E	397	396 0	394	C 393	. u	9	υu	ا 100 د	384 385
16 16 16																																												
0 0 0 0						•		•		•																					•		•		•			•		•		•		
551 551 550	44	4 4 8 8	48	47	4 5	12	2 2	42	4 4	2	4 4	3 9	37	37	37	37	37	3 6	36	ω i.	36	iii iii G	35	ພິພ 44 ⊓	44.	9 4	27	27	27	27	9 6	0 0	0 6	26	9 0	26	2 4	2 2	22	3 0	100	18	17	17
6 US-	6 US-	10 US	10 US	10 US	6 US-	6 US-	6 US-	6 US-	6 US-	6 US-	10 US-	6 US-	10 US	10 US	10 US	9 US-	9 US-	6 US-	10 US	6 US-	6 US-	10 US	10 US	10 US	10 US	6 US-	SO OT	10 US	10 US	10 US-	14 US	6 US-	e us-	6 US-	6 US-	6 US-	6 US-	o US-	10 US	6 US-	10 US	e us-	14 US	14 US
US-09-925-065A-19926 US-09-925-065A-187226 US-09-925-065A-187227 US-09-925-065A-728948	09-925	-10-30: -10-30:	-10-30	-10-30 -10-30	09-925	09-925	09-925 09-925	09-925	09-925	09-925	-10-30I	09-925	-10-30	-10-30	-10-301	10-301	10-301	-10-30: 09-925:	-10-30	09-925	09-925	-10-30: -10-30:	-10-30	-10-30	-10-30	09-925	-10-30	-10-30	-10-30	-10-30	-11-03	09-925	09-925	09-925	09-925	09-925	09-925	09-925	-10-30	09-925	-10-30	09-925	-11-12	-11-12
-065A-1 -065A-1 -065A-1	-065A-1	1-480-9 1-480-9	1-480-2 1-480-3	1-480-2 1-480-8	-065A-9	-065A-8	-065A-7	-065A-3	-065A-3	-065A-3	1-480-21	-065A-4	1-480-8 1-480-8	1-480-6	1-480-20	-480-20	-480-20	1-480-1 -065A-1	1-480-4	-065A-3	-065A-3	1-480-1 1-480-1	1-480-4	1-480-1 1-480-4	1-480-4	-065A-3	1-480-1	1-480-1	1-480-4	1-480-4	1-356-1	-065A-4	-065A-4	-065A-3	-065A-3	-065A-3	-065A-4	-065A-4	1-480-9	-065A-6	1-480-7	-065A-2	8-049-5	8-061-1 8-061-5
199926 187226 187227 128948	151722 151723	902001 946635	288592 333226	219912 333321	589089 178594	323048	750852 323047	76619	376605	76604	325842	181182	321447	321446	321445	8038)8037	21661	107764	186790	41696	027946	114538	1073300	159891	91684	016121	016120	102712	102711	6	178091	100402	34218	328778	328777	116820	100400	06194	550727	739122	24476	5174	1532
Sequence Sequence Sequence Sequence	Sequen	Seque	Sequence	Seque	Sequen	Sequen	Sequen	Sequen	Sequen	Sequen	Sequen	Sequen	Seque	Sequence	ranbas mentas	Sequen	Sequen	Seque	Seque	Sequen	Sequen	Seque	Seque	Seque	Sequence 459	Sequenc	Sequence	Seque	Seque	equence sequence	Seque	Sequenc	Sequen	Sequence	Sequen	Sequen	Sequen	Sequen	Seques	quen	renbes	Sequenc	Seque	Sequence
19 18 18 72	15	ي ب	ωω	ω N	17	8	82	37	37	37	8	4.	00 00	000	80 0	20	ce 2080	nce 102	nce 407	ce 3416 ce 4867	ce 3416	nce 102	nce 414	nce 107	nce 459	ce 3916	6 6	66	óó	6 L	Ä	4.4	4.	ωu	ıω	33	81	4.	mce 906	, e	- 1 h	0 24	10 1	
9926, 7226, 7227, 8948,	23	80	3592,	32	94,)48,	352, 347,	19,	505,	04	133,	82,	447,	446,	445.	38,)37,	21173,	764,	790,	96,	7946,	1538,	73300,	159891,	84	6121,	6120,	2712,	241, 2711,	App1	103,	02,	18,	178,	777,	201,	00,	194,	727,	122,			174, Ap
526 527 528	c 524 c 525	in in	រា គេ	ın ın	c 516 c 517	(n (נח נח	m	c 510	וחו	ın ın	1 (5)	0 50 50 50 50 50 50 50 50 50 50 50 50 50	ינח		1 (7		C 497	ъ.	494 495	c 493			4.4	C 485			C 482		478 C 479	477	475 476	47	C 473	47	47	4.4	46	4.66 4.66	4,4	46	4.6	46	c 457
16 16 16	16 16	16 16	16	16 16	16 16	16	16 16	16	16 16	16	16 16	16	16	16	16	16	16	16	16	16	16	16 16	16	16	16	16	16 16	16	16	16	16	16	16	16	1 16	16	7 D	16	16	16	16	16	16	16 16
2222																		•								•									•					•		•		
580 580	79 80	77	77	75 76	74 74	74	73	73	70	69	9 9	60	9 6	69	6 0	67	67	7 0	67	ο ο ο	99	0 0 4 0	64	25	61	5 9	5 5	59	5 9	9 6	59	J U	57	0 0 0 0	י טי	5 0	y O	5	55 6	5 25	51 5	15	51	55 55
6 US-0																																												
-09-925-065A-20 -09-925-065A-20 -09-925-065A-20 -09-925-065A-20	-09-925-065	-09-925-069	-09-925-065	-09-925-069	S-10-301-48 S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	-10-301-480	S-10-301-48	-09-925-065	-09-925-065	-09-925-065	S-10-301-48	-09-925-065	-09-925-065	-09-925-065	-10-301-48(-10-301-48(-09-925-065	S-10-301-48	S-10-301-48	S-10-301-48	S-10-301-48	-10-301-480	-09-925-06	-10-301-480 S-10-301-480	-09-925-065	S-10-301-48	-09-925-065	-09-925-065	-09-925-065	-09-925-065	-09-925-065	-09-925-065	S-10-301-48	8-10-301-48	S-10-301-48	-09-925-065 S-10-301-48
7013 7014 7015 7016	0365 4183	9253 9542	5923	4223 6118	8975 8976	5567	8982 5566	5573	0740 04149	44573	44571 44572	6141	1163	1162	4851 732	1442	0018	0016	7821	8167 1576	4073	7749 8893	3553	781	543	1690	7072 2985	7283	9576	3500	3499	5 4 5 5 5 5 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7	1102	3905	8927	4107	4105	3922	2380	4258	01652	01650	8243	8949 8241
Sequence 207013, Sequence 207014, Sequence 207015, Sequence 207016,	Sequence Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	epuenbes	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence
20701 20701 20701 20701	6203 1841	6192	4259	5942	. 858 858	245	958	345	1204	1044	9 1044 9 1044	8261	9 4311 1 4311	3 4311	3 8748 21273	2614	36001	36001	26782	9 2381 9 8515	66407	85774	11355	15578	5454	8906	9 6170 9 8829	2772	2695	3663	14349	23545	78110	9 2204	56892	42410	42410	64392	1223	2542	3 110	3 1101	4882	72894

							0.0	n n					_		_									_	იი						(o 0	0 0					_
c 599 600 601	595 596 597	592 594	c 590	D (D	ın ın	en en	1 (1) (וח נח	មេ	n tn	(n (n (n	in ti	572	15.15	C 569		J G G	.n .n	c 561	10.10	10.15	C 556		(n (r		549 550	548	546	544 544	543	541	540	n / n	537		c 533	
166	16 16	166	16	16	16 16	16 16	16	16 16	16	16	16	91 91	16	16	16	16	16	16	16 16	16 16	16 16	16	16	16	16 16	16	16	16	16	16	16	16	16	16	16	16	16 16	16
N N N N 9 9 9 9										•		•																										
603 603 603			ເກເກເ	n (n)	ເກເກ	ເກເກ	וטחנו	n un	un u	лuл	un u	л (л	மாம	חנח	LD (III	(n (r	ומו	n in i	n (n	in in	(n (n	ID (D	(0.1	n (n	10.45	17.1	n en	ID (F		B / B			15.11			n / n	/n /n	,,,
3 3 10 5 6 6																																					ច ១១	
SD 0	នួនូន	S G G	ផ្លូវ	. O	ផ្លូផ្ល	88	US S	30.5	0 08	S. U.S.	US-	.SD	US-	30.0	o us.	SOS	į į	เรา	Sur o	ខ្លួ	ខ្លួ	Sno	55	90	o us.	S. S.		99	g	90	្ត ប	SD	99	us	99	S. US	SD GS	
US-10-301-4 US-10-301-4 US-09-925-06 US-09-925-06	-09-9 9-90-	09-9	3-10-	3-10-	-10-	3-10-	10-3	09-9	3-10-	09-9	6-60	09-9	6-60	3-10-	.09-9 -10-	6-60	6-60	- 11-	3-10-	3-10-	9-10-	10-3	3-10-	5-10-	3-10-3	9-9	3-10-	G-10-	3-10-	3-10-	3-10-	9-9	3-10-	9-60-	9-10-	-09-9	-09-9	\circ
301- 301- 25-0	25-0 25-0	25-0 25-0	301-	301-	301- 301-	301-	01-4	301-	301-	25-0	25-0	25-0	25-0	301-	301-	25-0	25-0	25-0	301-	301-	301-	301-	301-	301-	301-4 301-	25-0	301-	301-	301-	301-	301-	25-0	301-	25-0	.301-	25-0)25-06)25-06	25
52 88	525	52 52	88	7 80 9	8 8	8 8	9 5	28	8 7	5.7	27 5	2 52	5 5	9 8	<u> </u>	2 5	. v. c	<u> </u>	Σ @	8 8	8 8	ဝှထ	800	0 00	ထုဝ	50 5	9 9	8 8	00 0	0 00	00 0	i yi	œ œ	ģ ģi	œ œ	יש פ	ຫຼັ	65
39232 10057 58069 39114	1-749615 1-749616 1-888628	55800 75098 75098	16744	11097	55924 L1097	19629	835	10414	12800	24419	24419	0010	35661	11995	79259 58617	54593	25907	54544	97421	52920 97421	36080	5797	10279	11453	7037 56044	17718	90813	90813 90813	29472	29472	29472	43411	11029	16949	11117	19576	34169 49576	43664
4733	ன் க ்க	க் ம் க்	υ ω	308	07	ūά	ā	25	ō ⊢	تتر د	ōö	5 6	40	85	ă ñ	4.00	ਯ	9	4	ωğ	à Ñ	75	48	9	<u></u>	ő	2 12	F 8	ناخيا	3 13	12 6	ביי ח	71	99	719	4.	₩ &	6
မိုင်ရှိ မိုင်ရှိ မိုင်ရှိ	Sequence Sequence	Seque Seque	Sequence	Sequ	ጠ ጠ	Seq Seq	ഹം		Seque	Seque	Seque	Seque	Seque	Seq	Seque	Sequence Sequence	Seque	Sequence	Sequ	Sequence	Seq	Seque	Sequ	Seq	Seque	Seque	seq	seq	Seq	seq.	bes	Sequ	Segu	Seque	Seg	5	5.5	Seque
o o c c	(0 (0 (0	וט וט וט			quence	8 8	(D (I	, Ci	sequence	nce	ence	nce	ence	rence	ence	ence	ence	ence	rence	rence	rence	ence	rence	ience	ence	ence	Sequence	rence	rence	ence	ence	quence	rence	ence	equence equence	ence	2 2	ence
392 100 5806	7496 7496 8886	6580 7509 7509	167	110	659	496	4583	104	428	2441	9021 2441	4001	3566	110	7925 586	IO N	2590	_ ທຸ:	974		360	9 107 1579	102	414	4703 660	4771	908	908	294	294	4341 9294	4341	110	1694	9 498 9 111	4957	3416	4366
324, 15733, 197,	26,	8,5	444, 0853	9708	244, 9707	298, 299,	, a	1415	006,	91,	90,	96	16,	9585	94, 176,	38,	75,	49,	214,	529206,	804, 805,	7075 7, A	7948	539,	7, A 446.	89,	132,	130,	724,	722,	15, 721,	14,	562, 2971	96,	310, 1719	64	98,	48
																																			••			
	c 668 c 669 c 670	665 C 666	C 663	c 661	659	c 657 658		654	653	c 651		648	646 647	645		c 641 c 642			c 636	C 634			c 629		c 625		C 622		c 619									
671 1 672 1 673 1 674 1	668 1 669 1	665 1 666 1	663 1	661		657 1 658 1	656 1	س د	- -	651 1	649 1 650 1	י בין ג		, д,	643 1 644 1	641 1 642 1	640	638	636 1	634	632 1 633 1	630 1 631 1	629 1	627	625 1 626 1	624 1	622	620 1 621 1	619 1	617	616 1	614	612	611	609 1	608	606 1	605
671 16 2. 672 16 2. 673 16 2. 674 16 2.	668 16 2. 669 16 2. 670 16 2.	665 16 2. 666 16 2. 667 16 2.	663 16 2. 664 16 2.	661 16 2.	16 2.	657 16 2. 658 16 2.	656 16 2.	16 2.	16 2. 16 2.	651 16 2.	649 16 2. 650 16 2.	16 2.	16 2.	16 2:	643 16 2. 644 16 2.	641 16 2. 642 16 2.	640 16 2.	638 16 2.	636 16 2.	634 16 2.	632 16 2. 633 16 2.	630 16 2. 631 16 2.	629 16 2.	627 16 2.	625 16 2. 626 16 2.	624 16 2.	622 16 2.	620 16 2. 621 16 2.	619 16 2.	617 16 2.	616 16 2.	614 16 2.	612 16 2.	611 16 2.	609 16 2. 610 16 2.	608 16 2.	606 16 2.	605 16 2
671 16 2.9 672 16 2.9 673 16 2.9 674 16 2.9	668 16 2.9 669 16 2.9 670 16 2.9	665 16 2.9 666 16 2.9 667 16 2.9	663 16 2.9 664 16 2.9	661 16 2.9	16 2.9	657 16 2.9 658 16 2.9	656 16 2.9	16 2.9	16 2.9 16 2.9	651 16 2.9	649 16 2.9 650 16 2.9	16 2.9	16 2.9 16 2.9	16 2.9	643 16 2.9 644 16 2.9	641 16 2.9 642 16 2.9	640 16 2.9	638 16 2.9	636 16 2.9	634 16 2.9	632 16 2.9 633 16 2.9	630 16 2.9 631 16 2.9	629 16 2.9	627 16 2.9	625 16 2.9 626 16 2.9	624 16 2.9	622 16 2.9	620 16 2.9 621 16 2.9	619 16 2.9	617 16 2.9	616 16 2.9 616 2.9	614 16 2.9	612 16 2.9	611 16 2.9	610 16 2.9	608 16 2.9	606 16 2.9	605 16 2.9
671 16 2.9 626 672 16 2.9 626 673 16 2.9 627 674 16 2.9 627	668 16 2.9 624 669 16 2.9 624 670 16 2.9 626	665 16 2.9 622 666 16 2.9 622 667 16 2.9 623	663 16 2.9 621 664 16 2.9 622	661 16 2.9 621	16 2.9 621 16 2.9 621	657 16 2.9 620 658 16 2.9 621	656 16 2.9 620	16 2.9 620	16 2.9 620 16 2.9 620	651 16 2.9 620	649 16 2.9 620 650 16 2.9 620	16 2.9 620	16 2.9 620 16 2.9 620	16 2.9 620	643 16 2.9 620 644 16 2.9 620	641 16 2.9 619 642 16 2.9 619	640 16 2.9 619	638 16 2.9 618	636 16 2.9 618	634 16 2.9 616	632 16 2.9 615 633 16 2.9 616	630 16 2.9 614 631 16 2.9 615	629 16 2.9 614	627 16 2.9 613	625 16 2.9 613 626 16 2.9 613	624 16 2.9 613	622 16 2.9 613	620 16 2.9 613 621 16 2.9 613	619 16 2.9 612	617 16 2.9 609	616 16 2.9 608	614 16 2.9 608	612 16 2.9 608 613 16 2.9 608	611 16 2.9 608	610 16 2.9 608 610 16 2.9 608	608 16 2.9 607	606 16 2.9 605	605 16 2.9 605
671 16 2.9 626 6 672 16 2.9 627 6 673 16 2.9 627 6	668 16 2.9 624 6 669 16 2.9 624 6 670 16 2.9 626 6	665 16 2.9 622 6 666 16 2.9 622 6 667 16 2.9 623 6	663 16 2.9 621 10 664 16 2.9 622 6	661 16 2.9 621 10	16 2.9 621 6 16 2.9 621 9	657 16 2.9 620 10 658 16 2.9 621 6	656 16 2.9 620 10	16 2.9 620 10	16 2.9 620 10 16 2.9 620 10	651 16 2.9 620 10	649 16 2.9 620 9 650 16 2.9 620 10	16 2.9 620 9	16 2.9 620 9 16 2.9 620 9	16 2.9 620 6	643 16 2.9 620 6 644 16 2.9 620 6	641 16 2.9 619 10 642 16 2.9 619 10	640 16 2.9 619 6	638 16 2.9 618 8	636 16 2.9 618 6	634 16 2.9 616 6	632 16 2.9 615 10 633 16 2.9 616 6	630 16 2.9 614 10 631 16 2.9 615 10	629 16 2.9 614 b	627 16 2.9 613 10	625 16 2.9 613 10 626 16 2.9 613 10	624 16 2.9 613 9	622 16 2.9 613 6	620 16 2.9 613 6 621 16 2.9 613 6	619 16 2.9 612 6	617 16 2.9 609 6	616 16 2.9 608 10	614 16 2.9 608 10	612 16 2.9 608 10 613 16 2.9 608 10	611 16 2.9 608 10	610 16 2.9 608 9	608 16 2.9 607 6	606 16 2.9 605 6 607 16 2.9 606 6	605 16 2.9 605 6
671 16 2.9 626 6 672 16 2.9 627 6 673 16 2.9 627 6 674 16 2.9 627 6	668 16 2.9 624 6 669 16 2.9 624 6 670 16 2.9 626 6	665 16 2.9 622 6 666 16 2.9 622 6 667 16 2.9 623 6	663 16 2.9 621 10 664 16 2.9 622 6	661 16 2.9 621 10	16 2.9 621 6 16 2.9 621 9	657 16 2.9 620 10 658 16 2.9 621 6	656 16 2.9 620 10	16 2.9 620 10	16 2.9 620 10 16 2.9 620 10	651 16 2.9 620 10	649 16 2.9 620 9 650 16 2.9 620 10	16 2.9 620 9	16 2.9 620 9 16 2.9 620 9	16 2.9 620 6	643 16 2.9 620 6 644 16 2.9 620 6	641 16 2.9 619 10 642 16 2.9 619 10	640 16 2.9 619 6	638 16 2.9 618 8	636 16 2.9 618 6	634 16 2.9 616 6	632 16 2.9 615 10 633 16 2.9 616 6	630 16 2.9 614 10 631 16 2.9 615 10	629 16 2.9 614 b	627 16 2.9 613 10	625 16 2.9 613 10	624 16 2.9 613 9	622 16 2.9 613 6	620 16 2.9 613 6 621 16 2.9 613 6	619 16 2.9 612 6	617 16 2.9 609 6	616 16 2.9 608 10	614 16 2.9 608 10	612 16 2.9 608 10 613 16 2.9 608 10	611 16 2.9 608 10	610 16 2.9 608 9	608 16 2.9 607 6	606 16 2.9 605 6 607 16 2.9 606 6	605 16 2.9 605 6
671 16 2.9 626 6 672 16 2.9 627 6 673 16 2.9 627 6	668 16 2.9 624 6 669 16 2.9 624 6 670 16 2.9 626 6	665 16 2.9 622 6 666 16 2.9 622 6 667 16 2.9 623 6	663 16 2.9 621 10 664 16 2.9 622 6	661 16 2.9 621 10	16 2.9 621 6 16 2.9 621 9	657 16 2.9 620 10 658 16 2.9 621 6	656 16 2.9 620 10	16 2.9 620 10	16 2.9 620 10 16 2.9 620 10	651 16 2.9 620 10	649 16 2.9 620 9 650 16 2.9 620 10	16 2.9 620 9	16 2.9 620 9 16 2.9 620 9	16 2.9 620 6	643 16 2.9 620 6 644 16 2.9 620 6	641 16 2.9 619 10 642 16 2.9 619 10	640 16 2.9 619 6	638 16 2.9 618 8	636 16 2.9 618 6	634 16 2.9 616 6	632 16 2.9 615 10 633 16 2.9 616 6	630 16 2.9 614 10 631 16 2.9 615 10	629 16 2.9 614 b	627 16 2.9 613 10	625 16 2.9 613 10	624 16 2.9 613 9	622 16 2.9 613 6	620 16 2.9 613 6 621 16 2.9 613 6	619 16 2.9 612 6	617 16 2.9 609 6	616 16 2.9 608 10	614 16 2.9 608 10	612 16 2.9 608 10 613 16 2.9 608 10	611 16 2.9 608 10	610 16 2.9 608 9	608 16 2.9 607 6	606 16 2.9 605 6 607 16 2.9 606 6	605 16 2.9 605 6
671 16 2.9 626 6 US-09-925-065A-3 672 16 2.9 626 6 US-09-925-065A-3 673 16 2.9 627 6 US-09-925-065A-3 674 16 2.9 627 6 US-09-925-065A-3	668 16 2.9 624 6 US-09-925-065A-1 669 16 2.9 624 6 US-09-925-065A-2 670 16 2.9 626 6 US-09-925-065A-2	665 16 2.9 622 6 US-09-925-065A-5 666 16 2.9 622 6 US-09-925-065A-5 667 16 2.9 623 6 US-09-925-065A-6	664 16 2.9 622 6 US-09-925-065A-	661 16 2.9 621 10 10-10-301-480-3	16 2.9 621 6 US-09-925-065A-1	657 16 2.9 620 10 US-10-301-480-1 658 16 2.9 621 6 US-09-925-065A-6	656 16 2.9 620 10 US-10-301-480-1	16 2.9 620 10 US-10-301-480-7	16 2.9 620 10 US-10-301-480-6	651 16 2.9 620 10 US-10-301-480-4	649 16 2.9 620 9 US-10-301-480-13 650 16 2.9 620 10 US-10-301-480-13	16 2.9 620 9 US-10-301-480-12	16 2.9 620 9 US-10-301-480-63	16 2.9 620 6 US-09-925-065A-	643 16 2.9 620 6 US-09-925-065A-2	641 16 2.9 619 10 US-10-301-480-642 16 2.9 619 10 US-10-301-480-642	640 16 2.9 619 6 US-09-925-065A-	638 16 2.9 618 8 US-10-793-626-26-26-26-26-26-26-26-26-26-26-26-26	636 16 2.9 618 6 US-09-925-065A-	634 16 2.9 616 6 US-09-925-065A-0635 16 2.9 618 6 US-09-925-065A-0635	632 16 2.9 615 10 US-10-301-480-0	630 16 2.9 614 10 US-10-301-480-631 16 2.9 615 10 US-10-301-480-631	629 16 2.9 614 10 US-10-301-480-	627 16 2.9 613 10 US-10-301-480-1	625 16 2.9 613 10 US-10-301-480-:	624 16 2.9 613 9 US-10-301-480-19	622 16 2.9 613 6 US-09-925-065A-	620 16 2.9 613 6 US-09-925-065A-9	619 16 2.9 612 6 US-09-925-065A-	617 16 2.9 609 6 US-09-925-065A-	616 16 2.9 608 10 US-10-301-480-	614 16 2.9 608 10 US-10-301-480-	612	611 16 2.9 608 10 US-10-301-480-	610 16 2.9 608 9 US-10-301-480-89	608 16 2.9 607 6 US-09-925-065A-	606 16 2.9 605 6 US-09-925-065A-	605 16 2.9 605 6 US-09-925-065A-
671 16 2.9 626 6 US-09-925-065A-3 672 16 2.9 626 6 US-09-925-065A-3 673 16 2.9 627 6 US-09-925-065A-3 674 16 2.9 627 6 US-09-925-065A-3	668 16 2.9 624 6 US-09-925-065A-1 669 16 2.9 624 6 US-09-925-065A-2 670 16 2.9 626 6 US-09-925-065A-2	665 16 2.9 622 6 US-09-925-065A-5 666 16 2.9 622 6 US-09-925-065A-5 667 16 2.9 623 6 US-09-925-065A-6	664 16 2.9 622 6 US-09-925-065A-	661 16 2.9 621 10 10-10-301-480-3	16 2.9 621 6 US-09-925-065A-1	657 16 2.9 620 10 US-10-301-480-1 658 16 2.9 621 6 US-09-925-065A-6	656 16 2.9 620 10 US-10-301-480-1	16 2.9 620 10 US-10-301-480-7	16 2.9 620 10 US-10-301-480-6	651 16 2.9 620 10 US-10-301-480-4	649 16 2.9 620 9 US-10-301-480-13 650 16 2.9 620 10 US-10-301-480-13	16 2.9 620 9 US-10-301-480-12	16 2.9 620 9 US-10-301-480-63	16 2.9 620 6 US-09-925-065A-	643 16 2.9 620 6 US-09-925-065A-2	641 16 2.9 619 10 US-10-301-480-642 16 2.9 619 10 US-10-301-480-642	640 16 2.9 619 6 US-09-925-065A-	638 16 2.9 618 8 US-10-793-626-26-26-26-26-26-26-26-26-26-26-26-26	636 16 2.9 618 6 US-09-925-065A-	634 16 2.9 616 6 US-09-925-065A-0635 16 2.9 618 6 US-09-925-065A-0635	632 16 2.9 615 10 US-10-301-480-0	630 16 2.9 614 10 US-10-301-480-631 16 2.9 615 10 US-10-301-480-631	629 16 2.9 614 10 US-10-301-480-	627 16 2.9 613 10 US-10-301-480-1	625 16 2.9 613 10 US-10-301-480-:	624 16 2.9 613 9 US-10-301-480-19	622 16 2.9 613 6 US-09-925-065A-	620 16 2.9 613 6 US-09-925-065A-9	619 16 2.9 612 6 US-09-925-065A-	617 16 2.9 609 6 US-09-925-065A-	616 16 2.9 608 10 US-10-301-480-	614 16 2.9 608 10 US-10-301-480-	612	611 16 2.9 608 10 US-10-301-480-	610 16 2.9 608 9 US-10-301-480-89	608 16 2.9 607 6 US-09-925-065A-	606 16 2.9 605 6 US-09-925-065A-	605 16 2.9 605 6 US-09-925-065A-
671 16 2.9 626 6 US-09-925-065A-3 672 16 2.9 626 6 US-09-925-065A-3 673 16 2.9 627 6 US-09-925-065A-3 674 16 2.9 627 6 US-09-925-065A-3	668 16 2.9 624 6 US-09-925-065A-1 669 16 2.9 624 6 US-09-925-065A-2 670 16 2.9 626 6 US-09-925-065A-2	665 16 2.9 622 6 US-09-925-065A-394016 666 16 2.9 622 6 US-09-925-065A-821124 667 16 2.9 623 6 US-09-925-065A-682241	664 16 2.9 622 6 US-09-925-065A-394015	661 16 2.9 621 10 US-10-301-480-337639	16 2.9 621 6 US-09-925-065A-182821 16 2.9 621 9 US-10-301-480-108093	657 16 2.9 620 10 US-10-301-480-1030310 658 16 2.9 621 6 US-09-925-065A-6856	656 16 2.9 620 10 US-10-301-480-738277	16 2.9 620 10 US-10-301-480-738276	16 2.9 620 10 US-10-301-480-675643 16 2.9 620 10 US-10-301-480-738275	651 16 2.9 620 10 US-10-301-480-416901	649 16 2.9 620 9 US-10-301-480-124868 650 16 2.9 620 10 US-10-301-480-416899	16 2.9 620 9 US-10-301-480-12	16 2.9 620 9 US-10-301-480-63	16 2.9 620 6 US-09-925-065A-	643 16 2.9 620 6 US-09-925-065A-23629 644 16 2.9 620 6 US-09-925-065A-23630	641 16 2.9 619 10 US-10-301-480-642 16 2.9 619 10 US-10-301-480-642	640 16 2.9 619 6 US-09-925-065A-	638 16 2.9 618 8 US-10-793-626-218367	636 16 2.9 618 6 US-09-925-065A-	634 16 2.9 616 6 US-09-925-065A-0635 16 2.9 618 6 US-09-925-065A-0635	632 16 2.9 615 10 US-10-301-480-0	630 16 2.9 614 10 US-10-301-480-631 16 2.9 615 10 US-10-301-480-631	629 16 2.9 614 10 US-10-301-480-	627 16 2.9 613 10 US-10-301-480-1	625 16 2.9 613 10 US-10-301-480-:	624 16 2.9 613 9 US-10-301-480-19	622 16 2.9 613 6 US-09-925-065A-	620 16 2.9 613 6 US-09-925-065A-9	619 16 2.9 612 6 US-09-925-065A-	617 16 2.9 609 6 US-09-925-065A-	616 16 2.9 608 10 US-10-301-480-	614 16 2.9 608 10 US-10-301-480-	612	611 16 2.9 608 10 US-10-301-480-	610 16 2.9 608 9 US-10-301-480-89	608 16 2.9 607 6 US-09-925-065A-	606 16 2.9 605 6 US-09-925-065A-	605 16 2.9 605 6 US-09-925-065A-
671 16 2.9 626 6 US-09-925-065A-398103 (672 16 2.9 626 6 US-09-925-065A-398104 (673 16 2.9 627 6 US-09-925-065A-315548 (674 16 2.9 627 6 US-09-925-065A-315549 (668 16 2.9 624 6 US-09-925-065A-104147 669 16 2.9 624 6 US-09-925-065A-287919 670 16 2.9 626 6 US-09-925-065A-387102	665 16 2.9 622 6 US-09-925-065A-394016 666 16 2.9 622 6 US-09-925-065A-821124 667 16 2.9 623 6 US-09-925-065A-682241	664 16 2.9 622 6 US-09-925-065A-394015	661 16 2.9 621 10 US-10-301-480-337639	16 2.9 621 6 US-09-925-065A-182821 16 2.9 621 9 US-10-301-480-108093	657 16 2.9 620 10 US-10-301-480-1030310 658 16 2.9 621 6 US-09-925-065A-6856	656 16 2.9 620 10 US-10-301-480-738277	16 2.9 620 10 US-10-301-480-738276	16 2.9 620 10 US-10-301-480-675643 16 2.9 620 10 US-10-301-480-738275	651 16 2.9 620 10 US-10-301-480-416901	649 16 2.9 620 9 US-10-301-480-124868 650 16 2.9 620 10 US-10-301-480-416899	16 2.9 620 9 US-10-301-480-124867	16 2.9 620 9 US-10-301-480-62234 16 2.9 620 9 US-10-301-480-124866	16 2.9 620 6 US-09-925-065A-23631	643 16 2.9 620 6 US-09-925-065A-23629	641 16 2.9 619 10 US-10-301-480-613295 642 16 2.9 619 10 US-10-301-480-1226704	640 16 2.9 619 6 US-09-925-065A-120412	638 16 2.9 618 US-10-793-626-2183	636 16 2.9 618 6 US-09-925-065A-330255	634 16 2.9 616 6 US-09-925-065A-673368	632 16 2.9 615 10 US-10-301-480-886757 633 16 2.9 616 6 US-09-925-065A-673167	630 16 2.9 614 10 US-10-301-480-832249 9 631 16 2.9 615 10 US-10-301-480-273348 9	629 16 2.9 614 10 US-10-301-480-218840 9	627 16 2.9 613 10 US-10-301-480-937655	625	624 16 2.9 613 9 US-10-301-480-158141 Si	622 16 2.9 613 6 US-09-925-065A-344361 St	620 16 2.9 613 6 US-09-925-065A-56903 St 621 16 2.9 613 6 US-09-925-065A-344359 St	619 16 2.9 612 6 US-09-925-065A-562602 St	617 16 2.9 609 6 US-09-925-065A-753481 Sec	616	614 16 2.9 608 10 US-10-301-480-702566 St	612	611 16 2.9 608 10 US-10-301-480-324694 Se	610 16 2.9 608 9 US-10-301-480-89156 Sequ	608 16 2.9 607 6 US-09-925-065A-887673 Sequ	606 16 2.9 605 6 US-09-925-065A-764605 Sequi	605 16 2.9 605 6 US-09-925-065A-764529 Segu
671 16 2.9 626 6 US-09-925-065A-398103 Sequenc 672 16 2.9 626 6 US-09-925-065A-398104 Sequenc 673 16 2.9 627 6 US-09-925-065A-315548 Sequenc 674 16 2.9 627 6 US-09-925-065A-315549 Sequenc	668 16 2.9 624 6 US-09-925-065A-104147 Sequenc 669 16 2.9 624 6 US-09-925-065A-287919 Sequenc 670 16 2.9 626 6 US-09-925-065A-388102 Sequenc	665 16 2.9 622 6 US-09-925-065A-394016 Sequenc 666 16 2.9 622 6 US-09-925-065A-821124 Sequenc 667 16 2.9 623 6 US-09-925-065A-682241 Sequenc	663 16 2.9 621 10 US-10-301-480-951048 Sequent 664 16 2.9 622 6 US-09-925-065A-394015 Sequence 664 16 2.9 622 6 US-09-925-065A-394015	661 16 2.9 621 10 10-10-301-480-337633 Sequence	16 2.9 621 6 US-09-925-065A-182821 Sequence 16 2.9 621 9 US-10-301-480-108093 Sequence 16 2.9 621 9 US-10-301-480-108093 Sequence 16 2.9 621 9 US-10-301-480-108093	657 16 2.9 620 10 US-10-301-480-1030310 Sequenc	656 16 2.9 620 10 US-10-301-480-738277 Sequen	16 2.9 620 10 US-10-301-480-738276 Sequen	16 2.9 620 10 US-10-301-480-675643 Sequen 16 2.9 620 10 US-10-301-480-738275 Sequen	651 16 2.9 620 10 US-10-301-480-416901 Sequen	649 16 2.9 620 9 US-10-301-480-124868 Sequenc	16 2.9 620 9 US-10-301-480-124867 Sequence	16 2.9 620 9 US-10-301-480-62234 Sequenc 16 2.9 620 9 US-10-301-480-124866 Sequenc	16 2.9 620 6 US-09-925-065A-23631 Sequence	643 16 2.9 620 6 US-09-925-065A-23629 Sequence 644 16 2.9 620 6 US-09-925-065A-23630 Sequence 644 16 2.9 620 6	641 16 2.9 619 10 US-10-301-480-613295 Sequer 642 16 2.9 619 10 US-10-301-480-1226704 Sequer	640 16 2.9 619 6 US-09-925-065A-440412 Sequence	638 16 2.9 618 8 US-03-03-03-03-03-03-03-03-03-03-03-03-03-	636 16 2.9 618 6 US-09-925-065A-330255 Sequenc	634 16 2.9 616 6 US-09-925-065A-673368 Sequenc	632 16 2.9 615 10 US-10-301-480-886757 Sequences 633 16 2.9 616 6 US-09-925-065A-673367 Sequences	630 16 2.9 614 10 US-10-301-480-832249 Sequer 631 16 2.9 615 10 US-10-301-480-273348 Sequer	629 16 2.9 614 6 US-U9-925-U65A-284473 Sequence 629 16 2.9 614 10 US-10-301-480-218840 Sequence	627 16 2.9 613 10 US-10-301-480-937655 Sequen	625 16 2.9 613 10 US-10-301-480-324246 Sequen	624 16 2.9 613 9 US-10-301-480-158141 Sequence	622 16 2.9 613 6 US-09-925-065A-344361 Sequence	620 16 2.9 613 6 US-09-925-065A-344359 Sequenc	619 16 2.9 612 6 US-09-925-065A-283831 Sequence	617 16 2.9 609 6 US-09-925-065A-753481 Sequenc	616 16 2.9 608 10 US-10-301-480-938103 Seguer 616 16 2.9 608 10 US-10-301-480-938104 Seguer	614 16 2.9 608 10 US-10-301-480-702566 Sequer	612 16 2.9 608 10 US-10-301-480-324695 Seguer 613 16 2.9 608 10 US-10-301-480-702565 Seguer	611 16 2.9 608 10 US-10-301-480-324694 Sequen	609 16 2.9 608 9 US-10-301-480-89156 Sequenc	608 16 2.9 607 6 US-09-925-065A-887673 Sequence	606 16 2.9 605 6 US-09-925-065A-764605 Sequence	605 16 2.9 605 6 US-09-925-065A-764529 Sequence
671 16 2.9 626 6 US-09-925-065A-398103 Sequen 672 16 2.9 626 6 US-09-925-065A-398104 Sequen 673 16 2.9 627 6 US-09-925-065A-315548 Sequen 674 16 2.9 627 6 US-09-925-065A-315549 Sequen	668 16 2.9 624 6 US-09-925-065A-104147 Sequenc 669 16 2.9 624 6 US-09-925-065A-287919 Sequenc 670 16 2.9 626 6 US-09-925-065A-388102 Sequenc	665 16 2.9 622 6 US-09-925-065A-394016 Sequenc 666 16 2.9 622 6 US-09-925-065A-821124 Sequenc 667 16 2.9 623 6 US-09-925-065A-682241 Sequenc	663 16 2.9 621 10 US-10-301-480-951048 Sequent 664 16 2.9 622 6 US-09-925-065A-394015 Sequence 664 16 2.9 622 6 US-09-925-065A-394015	661 16 2.9 621 10 10-10-301-480-337633 Sequence	16 2.9 621 6 US-09-925-065A-182821 Sequence 16 2.9 621 9 US-10-301-480-108093 Sequence 16 2.9 621 9 US-10-301-480-108093 Sequence 16 2.9 621 9 US-10-301-480-108093	657 16 2.9 620 10 US-10-301-480-1030310 Sequenc	656 16 2.9 620 10 US-10-301-480-738277 Sequen	16 2.9 620 10 US-10-301-480-738276 Sequen	16 2.9 620 10 US-10-301-480-675643 Sequen 16 2.9 620 10 US-10-301-480-738275 Sequen	651 16 2.9 620 10 US-10-301-480-416901 Sequen	649 16 2.9 620 9 US-10-301-480-124868 Sequenc	16 2.9 620 9 US-10-301-480-124867 Sequence	16 2.9 620 9 US-10-301-480-62234 Sequenc 16 2.9 620 9 US-10-301-480-124866 Sequenc	16 2.9 620 6 US-09-925-065A-23631 Sequence	643 16 2.9 620 6 US-09-925-065A-23629 Sequence 644 16 2.9 620 6 US-09-925-065A-23630 Sequence 644 16 2.9 620 6	641 16 2.9 619 10 US-10-301-480-613295 Sequer 642 16 2.9 619 10 US-10-301-480-1226704 Sequer	640 16 2.9 619 6 US-09-925-065A-440412 Sequence	638 16 2.9 618 8 US-03-03-03-03-03-03-03-03-03-03-03-03-03-	636 16 2.9 618 6 US-09-925-065A-330255 Sequenc	634 16 2.9 616 6 US-09-925-065A-673368 Sequenc	632 16 2.9 615 10 US-10-301-480-886757 Sequences 633 16 2.9 616 6 US-09-925-065A-673367 Sequences	630 16 2.9 614 10 US-10-301-480-832249 Sequer 631 16 2.9 615 10 US-10-301-480-273348 Sequer	629 16 2.9 614 6 US-U9-925-U65A-284473 Sequence 629 16 2.9 614 10 US-10-301-480-218840 Sequence	627 16 2.9 613 10 US-10-301-480-937655 Sequen	625 16 2.9 613 10 US-10-301-480-324246 Sequen	624 16 2.9 613 9 US-10-301-480-158141 Sequence	622 16 2.9 613 6 US-09-925-065A-344361 Sequence	620 16 2.9 613 6 US-09-925-065A-344359 Sequenc	619 16 2.9 612 6 US-09-925-065A-283831 Sequence	617 16 2.9 609 6 US-09-925-065A-753481 Sequenc	616 16 2.9 608 10 US-10-301-480-938103 Seguer 616 16 2.9 608 10 US-10-301-480-938104 Seguer	614 16 2.9 608 10 US-10-301-480-702566 Sequer	612 16 2.9 608 10 US-10-301-480-324695 Seguer 613 16 2.9 608 10 US-10-301-480-702565 Seguer	611 16 2.9 608 10 US-10-301-480-324694 Sequen	609 16 2.9 608 9 US-10-301-480-89156 Sequenc	608 16 2.9 607 6 US-09-925-065A-887673 Sequence	606 16 2.9 605 6 US-09-925-065A-764605 Sequence	16 2.9 605 6 US-09-925-065A-764529 Sequence

745 746 747 748		c 738 c 738		C 733	731 732	729	727		0 723						c 711						900	C 697	696 695	694		C 690	0 688 889 0	686 687	600		C 682		677
1166666	16 16	16	, 16 16	16	16 16	116	16	16	166	16	16	16	16	166	166	16	16	16	16	166	116	16	16 16	16	16	16	91	16 16	16	ع 16	16	16	166
759 759 759 759 759	728 728 759	726 726 727	719 719	711	869 683	283 289	679	654	644	0 0 0	6 A A A	644	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	642	642	638	637	636 637	636	635	634	634	63 4	634	634	633	633	631 632	631	629	629	628	628
9 US-10-301-480-131567 9 US-10-301-480-131567 9 US-10-301-480-131568 10 US-10-301-480-744976 10 US-10-301-480-744977 6 US-09-925-665A-42289	US-10-301-480-56241 US-10-301-480-11758 US-09-925-065A-30329	US-10-301-480-9 US-10-301-480-9 US-09-925-065A-	US-10-301-480-58516 US-10-301-480-11985	US-10-301-480-57633 US-10-301-480-11897	US-09-925-065A- US-09-925-065A-	US-09-925-065A-56325	US-10-301-480-69095	US-09-925-065A-18782 US-09-925-065A-18782 US-10-301-480-77550	US-10-301-480-89123	US-09-925-065A-557014	US-10-301-480-10751	US-10-301-480-46169 US-10-301-480-46169	US-10-301-480- US-10-301-480-	US-10-301-480-53373	US-U9-925-U65A-14775 US-10-301-480-53371 US-10-301-480-53372	US-10-301-480- US-10-301-480-	US-09-925-065A-39364 US-09-925-065A-75778	US-09-925-065A-82036 US-09-925-065A-39364	US-09-925-065A-90743	US-10-301-480-107899 US-09-925-065A-846914	US-10-301-480-10789	US-10-301-480-817730	US-10-301-480-46558 US-10-301-480-46558	US-10-301-480-204321 US-10-301-480-46558	US-09-925-065A-23216	US-10-301-480-10175	US-10-301-480-40410	US-09-925-065A-87473 US-09-925-065A-74144	US-09-925-065A-87472	US-10-301-480-97822	US-09-925-065A-47648 US-10-301-480-36481	US-10-301-480-10039	US-10-301-480- US-10-301-480-
Sequence 3033, A Sequence 131567, Sequence 131568, Sequence 744976, Sequence 744977, Sequence 42289,	Sequence 562 Sequence 117 Sequence 3032	928 923	8 6 5		Sequence 563256, Sequence 563257, Sequence 671743.							~ ~ :				22 22	10 10	10 10	נט נט	W (2	i i i	ce 817730		equence 20	2	e 101751	Sequence 404108	7.8	equence 87	Sequence s	quence 47 equence 3	Sequence 1	quence 928932 quence 390555 quence 390556
816 817 C 819 C 820	813 814 815	810 811 812	808 808	806	m m m		n m -	c 798	1 -1 -	1 -1 -	.11 -	.1 .3 .	.1 .1 .	786 787	783 784 785	781 782	779 780	777 778	-1 -1	c 774		770		. .	c 765		J	759 760	758	c 756	~ ·	752 753	750 751
16 16 16	16 16	16 16	16	16	7 T P	160	166	16	:::																								
									, 0, 0	9.00.0	16	16	16	166	16	16	16	16 16	16	16	16	16	16	16 16	16	166	16	16 16	16	16	16	16	166
•••••									, N.	. N.	۰»:	N N !	v N 1	. N. I	งงง		22	22	N N	, N N		ا د.	ν ν	. ง	N .	·	ı N	N N	N.	٥Ņ	N N		
1096 1198 1125 1152 1155	.9 1082 .9 1082 .9 1082	.9 1018 .9 1038 .9 1080	.9 1004	999	998	.9 997	.9 997	.9 987	2.9 984	2.9 982	2.9 982	2.9 978	2.9 968	2.9 936	2.9 930	2.9 894	2.9 894 2.9 894	2.9 894 2.9 894	2.9 865	2.9 865	2.9 865	2.9	2.9 859	2.9 838 2.9 838	2.9 838	2.9	2.9 834	2.9 807 2.9 834	2.9 805	2.9 799	2.9 776 2.9 799	2.9 775	2.9 775 2.9 775 2.9 775
	.9 1082 6 U	.9 1018 10 1 .9 1038 11 1 .9 1080 11 1	.9 1004 6 U	.9 999 10 1	.9 998 10 1	.9 997 10 1	.9 997 10 1	.9 984 10 (.9 987 10 (2.9 984 10 1	2.9 982 10 1	2.9 982 10 1	2.9 978 10 U	2.9 968 8 08	2.9 936 10 1	2.9 930 10 0	2.9 894 10 t	2.9 894 9 US 2.9 894 10 U	2.9 894 6 US 2.9 894 9 US	2.9 865 10 to 2.9 894 6 US	2.9 865 10 0	2.9 865 10 1	2.9 859 10 1	2.9 859 6 US	2.9 838 9 US	2.9 838 6 US	2.9 834 10 (2.9 834 9 US	2.9 807 6 US 2.9 834 6 US	2.9 805 10 1	2.9 799 8 US	2.9 776 11 to 2.9 799 8 US	2.9 775 10 0	2.9 775 6 US 2.9 775 9 US 2.9 775 9 US

C C 888 C C 889 C C 899 C 890 C	ထ ထ ထ ထ ထ ၊	9 8 8 8 8 7 9 8 8 7	873 874 875	777		, a a a	ת סת		រហបប	ហសហ	440	444	444	44	. Lu Lu	w w u	888	83	82	882	C C C C C C C C C C C C C C C C C C C	0 00 00
10 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	16666	16666	16666	16	1666	1666	166	1666	1666	16 16 16	16 16 16	16 16	16 16	16	16	16	16	16 16	16	16 16	16 16	16
00000000000000000000000000000000000000																						
2333 2333 2352 2512 2512 2636 2636 2732	2127 2166 2166 2238 2247 2247	2057 2099 2099 2106	2020 2020 2057 2057	1770 1770 1830	1714 1767	1698	1626 1626 1698	1544	1381 1497 1497	1335 1379 1381	1335 1335 1335	1304 1335 1335	1293 1293 1304	1276	1240 1249	1240	1188 1219	1186	1155 1155	1155 1155	1155	1155
7 000 100	7 14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	14 8 8 10 1 4 4 4 10 1 1 10 1 1	9666	619	7 H 8 9	6 6 6		988	3 ° 6 5	10 11 9	10 UU	0 0 0 0 0 0	8 6 6		0 U		0 U	01 0 0	10	10	9 9 9	, 6 6
US-10-750-185-39176 US-10-750-623-39176 1 US-11-285-818-15 US-10-750-185-42273 US-10-750-623-42273 US-10-750-623-42237 US-10-750-623-42237 US-10-750-623-42037 US-10-750-623-42037	S-10-750-623-4 US-11-052-554A US-11-074-176- US-11-074-176-	JS-10-301-480- S-10-750-185-6 S-10-750-623-6 S-11-052-554A	S-09-925-065A- S-09-925-065A- S-09-925-065A- S-10-301-480-1	S-10-301-480-1 US-10-301-480- S-09-925-065A-	S-10-750-623-3 US-11-096-568A	S-10-301-480-1 S-10-301-480-1 S-10-301-480-1	S-10-750-185-3 S-10-750-623-3	S-10-750-185-5 S-10-750-623-5 S-09-925-065A-	US-10-301-480- S-09-925-065A- S-10-301-480-1	US-10-301-480- US-11-172-740- S-10-301-480-3	S-10-301-480-1 S-10-301-480-1 US-10-301-480-	S-10-750-623-6 S-09-925-065A- S-09-925-065A-	S-10-932-182A- S-10-932-182A- S-10-750-185-6	S-10-750-185-3 S-10-750-623-3	US-10-301-480- S-09-925-065A-	S-10-301-480-2 S-10-301-480-2 US-10-301-480-2	US-11-235-254- S-09-925-065A-	S-10-301-480-3 US-10-301-480-	US-10-301-480- US-10-301-480-	US-10-301-480- US-10-301-480-	S-10-301-480-J S-10-301-480-J S-10-301-480-J	S-09-925-065A- S-09-925-065A-
-39176 -39176 8-15 8-15 -40273 -40273 -42037	7387 7387 313 313	804877 1769 1769 614	701933 701934 90227 91468	72778 786187 704412	72665	71874	1331 1331 1331	3637 3637 702970	648609 68553 .69792	756107 1560 5200	.42697 .42698 .756106	0365 41459 41460	75911 75911 0365	7419	642304 283830	.642303	18 682902	647441	·798798 ·798799		.85387 .85388 .85390	.84149 .84150
Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence		1 4 5 5 4	5555	5 5 5 6	Sequence Sequence	Sequence Sequence	Sequence	Sequence Sequence Sequence	Sequence 6 Sequence 1	Sequence Sequence Sequence	Sequence 1 Sequence 1 Sequence 1	Sequence Sequence	Sequence Sequence Sequence	Sequence Sequence	Sequence	Sequence Sequence	Sequence Sequence	quenc	eque:	Sequer	quenc quenc	equenc
39176, A 39176, A 39176, A e 15, Appl 40273, A 40273, A 42037, A 42037, A 42037, A	47387, A 47387, A 636, App 313, App 53, Appl	ce 804877, 61769, A 61769, A ce 614, App	e 701933, e 701934, e 90227, A e 191468,	172778, 786187, 704412,	37266, A 37266, A 32665, A	70635, A 171874, 785283,	31331, A 31331, A	702970	648609, 68553, A 169792,	756107, 1560, Ap 35200, A	142697, 142698, 142698,	60365, A 41459, A 41460 A	75911, A 75911, A 60365, A	37419, A 37419, A	642304, 283830,	28894, A 28895, A 642303	18, Appl 682902,	34032, A 647441,	798798, 798799,	798796, 798797,	185387, 185388, 185390.	84149, A 84150, A
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0						C 937			c 927 c 928 c 929			C 918		913 914	911 912	909 910	906 907		c 902	900	C 897	
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	950 951 952 953	946 947 948 949	943 945	940 941	937 938	934	931 932 932	927 928 929	924 925 926	921 922	918 919	915 916 917					904 905	902 903		897 898 899	895 896
960 16 2.9 961 16 2.9 962 16 2.9 963 16 2.9 964 16 2.9 965 16 2.9 966 16 2.9 966 16 2.9	955 16 2.9 957 16 2.9 957 16 2.9 958 16 2.9	950 16 2.9 951 16 2.9 952 16 2.9 953 16 2.9	946 16 2.9 947 16 2.9 948 16 2.9 949 16 2.9	943 16 2.9 944 16 2.9 945 16 2.9	939 16 2.9 940 16 2.9 941 16 2.9	936 16 2.9 938 16 2.9	934 16 2.9 935 16 2.9	930 16 2.9 931 16 2.9 932 16 2.9	927 16 2.9 928 16 2.9 929 16 2.9	924 16 2.9 925 16 2.9 926 16 2.9	922 16 2.9	918 16 2.9 919 16 2.9	915 16 2.9 916 16 2.9 917 16 2.9	16 2.9 16 2.9	16 2.9	16 2.9 16 2.9	16 2.9 16 2.9	904 16 2.9 905 16 2.9	902 16 2.9 903 16 2.9	16 2.9 16 2.9	897 16 2.9 898 16 2.9 899 16 2.9	895 16 2.9 896 16 2.9
960 961 961 962 16 20 962 16 20 964 16 20 965 16 20 967 16 20 967 16 20 968 968 968 968 968 968 968 968	955 16 2.9 957 16 2.9 957 16 2.9 958 16 2.9	950 16 2.9 951 16 2.9 952 16 2.9 953 16 2.9	946 16 2.9 947 16 2.9 948 16 2.9 949 16 2.9	943 16 2.9 944 16 2.9 945 16 2.9	939 16 2.9 940 16 2.9 941 16 2.9	936 16 2.9 938 16 2.9	934 16 2.9 935 16 2.9	930 16 2.9 931 16 2.9 932 16 2.9	927 16 2.9 928 16 2.9 929 16 2.9	924 16 2.9 925 16 2.9 926 16 2.9	922 16 2.9	918 16 2.9 919 16 2.9	915 16 2.9 916 16 2.9 917 16 2.9	16 2.9 16 2.9	16 2.9	16 2.9 16 2.9	16 2.9 16 2.9	904 16 2.9 905 16 2.9	902 16 2.9 903 16 2.9	16 2.9 16 2.9	897 16 2.9 898 16 2.9 899 16 2.9	895 16 2.9 896 16 2.9
960 16 2.9 9808 8 961 16 2.9 9808 1 962 16 2.9 12604 1 963 16 2.9 12604 1 964 16 2.9 14561 1 965 16 2.9 14561 1 965 16 2.9 24861 9 967 16 2.9 25257 8	955 16 2.9 7884 9 955 16 2.9 8354 1 957 16 2.9 8408 1 957 16 2.9 9430 1 958 16 2.9 9430 1	950 16 2.9 6435 1 951 16 2.9 6464 1 952 16 2.9 6525 1 953 16 2.9 7487 1	946 16 2.9 5787 1 947 16 2.9 6156 8 948 16 2.9 6171 1 949 16 2.9 6191 1	943 16 2.9 5584 1 944 16 2.9 5584 1 945 16 2.9 5676 1	939 16 2.9 5085 1 940 16 2.9 5085 1 941 16 2.9 5190 1	936 16 2.9 4938 1 937 16 2.9 5027 1 938 16 2.9 5065 8	934 16 2.9 4907 1 935 16 2.9 4922 1	930 16 2.9 4614 8 931 16 2.9 4627 1 932 16 2.9 4627 1 933 16 2.9 4680 1	927 16 2.9 4428 1 928 16 2.9 4470 1 929 16 2.9 4614 8	924 16 2.9 3999 9 925 16 2.9 4019 9 926 16 2.9 4409 1	921 16 2.9 3668 1 922 16 2.9 3840 8 923 16 2.9 3840 8	918 16 2.9 3532 8 919 16 2.9 3543 8 920 16 2.9 3547 6	915 16 2.9 3340 1 916 16 2.9 3450 8 917 16 2.9 3450 8	16 2.9 3340 9 16 2.9 3340 1	16 2.9 3340 6 16 2.9 3340 9	16 2.9 3192 1 16 2.9 3253 8	16 2.9 3081 1 16 2.9 3192 9	904 16 2.9 3081 6 905 16 2.9 3081 9	902 16 2.9 3015 9 903 16 2.9 3053 8	16 2.9 3011 8 16 2.9 3015 9	897 16 2.9 2788 6 898 16 2.9 2788 6 899 16 2.9 3011 8	895 16 2.9 2760 8 896 16 2.9 2760 8
960 16 2.9 9808 961 16 2.9 9808 962 16 2.9 12604 963 16 2.9 12604 964 16 2.9 14561 965 16 2.9 14561 966 16 2.9 24861 967 16 2.9 25257	955 16 2.9 7884 9 955 16 2.9 8354 1 957 16 2.9 8408 1 957 16 2.9 9430 1 958 16 2.9 9430 1	950 16 2.9 6435 1 951 16 2.9 6464 1 952 16 2.9 6525 1 953 16 2.9 7487 1	946 16 2.9 5787 1 947 16 2.9 6156 8 948 16 2.9 6171 1 949 16 2.9 6191 1	943 16 2.9 5584 1 944 16 2.9 5584 1 945 16 2.9 5676 1	939 16 2.9 5085 1 940 16 2.9 5085 1 941 16 2.9 5190 1	936 16 2.9 4938 1 937 16 2.9 5027 1 938 16 2.9 5065 8	934 16 2.9 4907 1 935 16 2.9 4922 1	930 16 2.9 4614 8 931 16 2.9 4627 1 932 16 2.9 4627 1 933 16 2.9 4680 1	927 16 2.9 4428 1 928 16 2.9 4470 1 929 16 2.9 4614 8	924 16 2.9 3999 9 US-10-933-746-40 925 16 2.9 4019 9 US-10-933-746-39 926 16 2.9 4409 14 US-11-136-527-2275	921 16 2.9 3668 11 US-11-072-175-123-3 921 16 2.9 3840 BUS-10-793-626-3187 922 16 2.9 3840 BUS-10-793-626-3187 923 16 2 9 394 INS-11-174-795-B	918 16 2.9 3532 8 US-10-793-626-3752 919 16 2.9 3543 8 US-10-793-626-4149 919 16 2.9 3543 8 US-10-793-626-4149	915 16 2.9 3340 10 US-10-301-480-770586 916 16 2.9 3450 8 US-10-750-185-45802 917 16 2.9 3450 8 US-10-750-623-45802	16 2.9 3340 9 US-10-301-480-157177 16 2.9 3340 10 US-10-301-480-770585	16 2.9 3340 6 16 2.9 3340 9	16 2.9 3192 10 US-10-301-480-7119 16 2.9 3253 8 US-10-793-626-3887	16 2.9 3081 1 16 2.9 3192 9	904 16 2.9 3081 6 905 16 2.9 3081 9	902 16 2.9 3015 9 903 16 2.9 3053 8	16 2.9 3011 8 16 2.9 3015 9	897 16 2.9 2788 6 898 16 2.9 2788 6 899 16 2.9 3011 8	895 16 2.9 2760 8 US-10-750-185-33026 896 16 2.9 2760 8 US-10-750-623-33026

```
RESULT 2
US-09-925-065A-648674
) Sequence 648674, Application US/09925065A
; Publication No. US20040181048A1
; GENERAL INFORMATION:
                                                                                              밁
                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-121-849-630382
                                                                                                                                                                                                    US-11-121-849-630382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0 0 0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     იი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               000
                                                                                                                                                                                                                                           APPLICANT: John Palma
TITLE OF INVENTION: Methods of Genetic Analysis of Formalin
TITLE OF INVENTION: Microarrays
FILE REFERENCE: 3684.1
CURRENT APPLICATION NUMBER: US/11/121,849
CURRENT FILING DATE: 2005-05-03
PRIOR APPLICATION NUMBER: 60/567,949
PRIOR FILING DATE: 2004-05-03
NUMBER OF SEQ ID NOS: 673904
SOPTWARE: Microarray Probe Sequence Listing Generator V 1.1
SEQ ID NO 630382
ILBMCTH. 25
                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 630382, Application US/11121849 Publication No. US20050272080A1 GENERAL INFORMATION:
                                                                                                                                               Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             985
985
986
987
998
998
                                                                                                                                                                                                                                TYPE: DA
                                                                                                                                                                                                               ORGANISM: Homo sapien
                                                                                                                                                                                                                          DNA
                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        164527
172147
173602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100000
103931
114801
118544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               173995
177175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180654
193363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           198285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137935
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              89008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             83391
                                                                                                                                                          3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             67088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 70513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 US-10-995-561-13461

4 US-11-117-187-194

14 US-11-117-187-188

14 US-11-124-368A-2901

14 US-11-117-187-193

14 US-11-117-187-193

14 US-11-121-086-22

18 US-10-395-561-13278

US-10-995-561-13278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4 US-11-121-086-90
US-10-995-561-13272
US-11-121-086-71
4 US-11-121-086-71
4 US-11-121-086-71
4 US-11-121-086-72
4 US-11-121-086-79
4 US-11-121-086-58
4 US-11-121-086-58
4 US-11-121-086-58
4 US-11-121-086-58
4 US-11-121-086-58
4 US-11-112-908-51
5 US-11-112-908-51
6 US-11-112-908-51
7 US-11-112-908-51
8 US-11-775-169-88
9 US-10-775-169-88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-995-561-13368
US-10-330-773-43
US-10-330-773-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-11-159-597-20
US-11-153-238-4
US-11-124-367A-5066
US-11-117-187-186
                                                                                                                                              °,
                                                                                                                                                            Score 20; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-11-150-888-16
US-11-117-187-189
US-11-124-367A-5098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ALIGNMENTS
                                                                                                                                                 Mismatches
                                                                                                                                                            DB 14; Length 25; 2.6;
                                                                                                                                                                                                                                                                                                                                                                         of Formalin Fixed Paraffin Embedded
                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20, Appl
Sequence 4, Appli
Sequence 5066, Ap
Sequence 1366, App
Sequence 1368, Appl
Sequence 16, Appl
Sequence 16, Appl
Sequence 189, App
Sequence 13461, Appl
Sequence 13461, Appl
Sequence 194, App
Sequence 193, App
Sequence 2901, Appl
Sequence 193, App
Sequence 193, Appl
Sequence 176, Appl
Sequence 177, Appl
Sequence 13278, A
Sequence 13278, A
Sequence 27, Appl
Sequence 31, Appl
Sequence 13, Appl
Sequence 13, Appl
Sequence 31, Appl
                                                                                                                                              ..
..
                                                                                                                                              Gaps
                                                                                                                                              0;
```

```
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
FILE REFERENCE: 108627.135
CCURRENT REFERENCE: 108627.135
CCURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR APPLICATION NUMBER: US 60/252,092
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FASESEQ for Windows Version 4.0
SEQ ID NO 648674
LENGTH: 552
TYPE: DNA
                                                                                                                                                                                                                                    FILE OF INVESTMENT
FILE OF INVESTMENT
FILE OF INVESTMENT
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR FILING DATE: 2000-11-20
PRIOR PILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR PILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR PILING DATE: 2000-11-6
PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
SECTUMARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 6448755
밁
                                      Ş
                                                                                                                                                                         ; TYPE: DNA; Homo sapiens; ORGANISM: Homo sapiens US-09-925-065A-648675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-09-925-065A-648675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
US-09-925-065A-648674
                                                                                    Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 648675, Application US/09925065A Publication No. US20040181048A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.0%;
mes 20; Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      350 GAAGAGAGAAATACAAAAGT 369
                                         361 GAAGAGAAAATACAAAAGT 380
                                                                                      Conservative
                                                                                                         100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.6%;
                                                                                    0.
                                                                                                         Score 20; DB 6; Pred. No. 3.7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20; DB 6; Pred. No. 3.7;
                                                                                      Mismatches
                                                                                                                               DB 6;
                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 552;
                                                                                                                               Length 552;
                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human Genome
                                                                                    <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,,</u>
                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,,</u>
```

RESULT 4 US-09-925-065A-223976/c

```
US-09-925-065A-223977/c
; Sequence 223977, Application US/09925065A
; Publication No. US20040181048A1
; GENERAL INFORMATION:
                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 108827.135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILLING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2001-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-09-925-065A-223976
                                                                                                                                                                                US-09-925-065A-223977
                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR APPLICATION NUMBER: US 60/289,846
                                                                                                                                                                                                                                               SEQ ID NO 223977
LENGTH: 537
                                                                                         Matches
                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQ ID NO 223976
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 223976, Application US/09925065A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/925,065A CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ
                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 108827.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216 GATTGTAAATGTTTTAGAA 234
                                          216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                74 GATTGTAAATGTTTTAGAA 56
74 GATTGTAAATGTTTTAGAA 56
                                                                                                                Similarity
                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                          for Windows Version 4.
                                                                                                                                                                                                                                                                                                                                      2001-05-09
                                                                                                              100.0%;
                                                                                                            3.4%; Score 19;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.4%; Score 19; DB 6; 00.0%; Pred. No. 13;
                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                      Mismatches
                                                                                                              13
13
                                                                                                                                   6
                                                                                      ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 537;
                                                                                                                            Length 537;
                                                                                      Indels
                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
```

```
밁
                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-308848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of
TITLE OF INVENTION: In the Human Genome
FILE REFERENCE: 108827.137
CCURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ 1D NOS: 1226818
COUNTY OF THE ORDER ORDER OF THE ORDER OF THE ORDER OF THE ORDER OF THE ORDER OF TH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens US-09-925-065A-643642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-301-480-308848/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-925-065A-643642/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILLING DATE: 2000-10-24
PRIOR PELICATION NUMBER: US 60/252,147
PRIOR PELLING DATE: 2000-11-20
PRIOR PELLING DATE: 2000-11-30
PRIOR PELLING DATE: 2000-11-30
PRIOR PELLING DATE: 2001-01-16
PRIOR PELLING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR APPLICATION NUMBER: US 60/289,846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 643642, Application US/09925065A
Publication No. US20040181048A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827.135
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 308848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ
SEQ ID NO 643642
                                                                                                                                                 Matches
                                                                                                                                                                                        Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 308848, Application US Publication No. US20060057564A1
                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/925,065A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 540
                                                                                                                                                                                Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           360 AGAAGAGAGAAAATACAAAA 378
                                       216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                476 AGAAGAGAGAAATACAAAA 458
82
                                                                                                                                                 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19;
                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Application US/10301480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.4%; bu
100.0%; Pr
                                                                                                                                                                                    3.4%; Score 19;
100.0%; Pred. No.
                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 19; DB; Pred. No. 13
                                                                                                                                             Mismatches
                                                                                                                                                                                                               DB 10; Length 545;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       of Single Nucleotide Polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 540;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                             Indels
                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

RESULT 8 US-10-301-480-308849/c

```
δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA; Homo sapien US-10-301-480-308849
                                                                                                                                                                                                                  RESULT 10
US-10-301-480-922258/c
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-301-480-922257/c
Sequence 922257, Application US/10301480
Publication No. US20060057564A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo sapien
US-10-301-480-922257
Sequence 922258, Application US/10301480
Publication No. US20060057564A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FREESEQ for Windows Version 4.0
SEQ ID NO 308849
LENGTH: 545
                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 922257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Wang, David G.

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT FILING DATE: 2002-11-21
PRIOR FILING DATE: 2002-01-215,598

PRIOR FILING DATE: 2002-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 308849, Application US/10301480 Publication No. US20060057564A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/311,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                  Match 3.4%; Score 19; DB 10; Local Similarity 100.0%; Pred. No. 13;
                                                                                                                                                                                                                                                                                                                                          216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                    82 GATTGTAAATGTTTTAGAA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           82 GATTGTAAATGTTTTAGAA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.4%; Score 19; DB 10; 100.0%; Pred. No. 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of Single Nucleotide Polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 545;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 545;
                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
```

```
RESULT 12
US-09-925-065A-906587/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Watches 19; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-301-480-922258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-11-079-463-724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-11-079-463-724
                                                                                                                                                                                                                     Sequence 906587, Application US/09925065A

Publication No. US20040181048A1

GENERAL INFORMATION:
APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827, 135

CURRENT APPLICATION NUMBER: US/09/925,065A

CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 724, Application US/11079463
publication No. US20060073161A1
GENERRAL INFORMATION:
APPLICANT: Gary L. Breton
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO BACTEROIDES
TITLE OF INVENTION: FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: PATHO0-03DIV2
CURRENT FILING DATE: 2005-03-14
PRIOR APPLICATION NUMBER: US/01/28,705
PRIOR APPLICATION NUMBER: US 60/128,705
PRIOR APPLICATION NUMBER: US 60/128,705
PRIOR APPLICATION NUMBER: US 09/540,209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 922258
LENGTH: 545
TYPE: NY 545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 10444
SEQ ID NO 724
LENGTH: 564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                             PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR APPLICATION NUMBER: US 60/261,766
                          PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA ORGANISM: B.fragilis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.0%; Files 19; Conservative 0;
FILING DATE: 2001-01-16
APPLICATION NUMBER: US
FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           268 GAAGTAGCTGAAGCTTTCA 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATTGTAAATGTTTTAGAA 64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.4%; Score 19;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.44;
                       60/289,846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 19; DB; Pred. No. 13; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 11; Length 564; 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10; Length 545;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
```

F

```
RESULT 14
US-11-101-244-152034
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 646
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-065A-912775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 646
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-065A-906587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 13
US-09-925-065A-912775
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILLING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILLING DATE: 2000-11-20
PRIOR FILLING DATE: 2000-11-30
PRIOR FILLING DATE: 2000-11-30
PRIOR FILLING DATE: 2011-01-16
PRIOR FILLING DATE: 2011-01-16
PRIOR FILLING DATE: 2011-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILLING DATE: 2011-05-09
PRIOR FILLING DATE: 2011-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 912775
                                                                                                                                                                                                                                                                                                    Sequence 152034, Application US/11101244 Publication No. US20050246794A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 906587
                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 912775, Application US/09925065A Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                            APPLICANT: Marshall, William
APPLICANT: Scaringe, Stephen
TITLE OF INVENTION: Functional and Hyperfunctional sirNA
FILE REFERENCE: 13499US
CURRENT APPLICATION NUMBER: US/11/101,244
CURRENT FILING DATE: 2005-04-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 10827.135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                             APPLICANT:
PRIOR APPLICATION NUMBER: 60/502,050
PRIOR FILING DATE: 2003-09-10
PRIOR APPLICATION NUMBER: 60/426,137
                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                          APPLICANT: Dharmacon, Inc.
                                                                                                                                                                                                                                                                                                                                                                                                                                        479
                                                                                                                                                                                                                                                                                                                                                                                                                                                              216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              168 GATTGTAAATGTTTTAGAA 150
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      216 GATTGTAAATGTTTTAGAA 234
                                                                                                                                                                                                                                                                                                                                                                                                                                   GATTGTAAATGTTTTAGAA 497
                                                                                                                                                                                             Leake, Devin
                                                                                                                                                                                                               Khvorova, Anastasia
Reynolds, Angela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.4%; Score 19; DB 6; ilarity 100.0%; Pred. No. 13; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.4%; Score 19;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         .
13,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 646;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 646
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
APPLICANT: Leake, Devin
APPLICANT: Marshall, William
APPLICANT: Marshall, William
APPLICANT: Scaringe, Stephen
TITLE OF INVENTION: Functional and Hyperfunctional siRNA
FILE REFERENCE: 13499US
CURRENT APPLICATION NUMBER: US/11/083,784
CURRENT FILING DATE: 2005-03-18
PRIOR APPLICATION NUMBER: US/10/714,333
PRIOR FILING DATE: 2003-11-14
PRIOR APPLICATION NUMBER: 60/502,050
PRIOR APPLICATION NUMBER: 60/426,137
PRIOR APPLICATION NUMBER: 60/426,137
PRIOR FILING DATE: 2003-11-14
PRIOR APPLICATION NUMBER: 60/426,137
PRIOR FILING DATE: 2002-11-14
                                                                                                                                                                                                                                                                                                      RESULT 16
US-11-098-686-5201/c
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens US-11-083-784-152034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-11-101-244-152034
CURRENT APPLICATION NUMBER: US/11/098,686
CURRENT FILING DATE: 2005-04-04
PRIOR APPLICATION NUMBER: PCT/US03/31318
PRIOR FILING DATE: 2003-10-01
PRIOR APPLICATION NUMBER: US 60/416,395
PRIOR FILING DATE: 2002-10-04
NUMBER OF SEQ ID NOS: 11433
SOFTMARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-11-083-784-152034
                                                                                                                                                                                                                                                               Sequence 5201, Application US/11098686 Publication No. US20060024696A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Proprietary
SEQ ID NO 152034
                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION: APPLICANT: Dharmacon,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity Matches 13; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 152034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 152034, Application US Publication No. US20050245475A1
                                                                                                                                                                           APPLICANT: Kapur, Vivek and Gebhart, Connie J.
TITLE OF INVENTION: NUCLEIC ACID AND POLYPEPTIDE SEQUENCES
TITLE OF INVENTION: FROM LAWSONIA INTRACELLULARIS AND METHODS OF USING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2002-11-14
NUMBER OF SEQ ID NOS: 1591911
SOFTWARE: Proprietary
                                                                                                                                                              FILE REFERENCE: 09531-128001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 1591911
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 19
TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: RNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       397 TCTAGAATTTCAGAAGAA 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2 UCUAGAAUUUCAGAAGAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2 UCUAGAAUUUCAGAAGAA 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Khvorova, Anastasia
Reynolds, Angela
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/11083784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>ب</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 18; DB
Pred. No. 32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nuclectide Polymorphisms in the Human Genome
FILE REFERENCE: 108827.135
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR APPLICATION NUMBER: US 60/252,092
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2001-01-16
PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR DATE: 2001-01-16
PRIOR PRIOR PRIOR NUMBER: US 60/289,846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: DNA; Homo sapiens US-09-925-065A-539145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 18
US-09-925-065A-539146/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-11-098-686-5201
                PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR PEPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-01-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-925-065A-539145/c
                                                                                                                                                                                                 GENERAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single

TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome

FILE REFERENCE: 108827.135

CURRENT APPLICATION UNMERR: US/09/925,065A

CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 539145
LENGTH: 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 539145, Application US/09925065A Publication No. US20040181048A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 5201
LENGTH: 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 18;
                                                                                                                                                                                                                                                                                                                                                                Sequence 539146, Application US/09925065A Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA ORGANISM: Lawsonia intracellularis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
FILING DATE:
APPLICATION N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   348 TAAAGAGGTTGCAGAAGA 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238 TGATTTAGAAGCAGAAGC 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            117 TGATTTAGAAGCAGAAGC 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAAAGAGGTTGCAGAAGA 171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.2%; Score 18; DB
100.0%; Pred. No. 45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.2%; Score 18;
100.0%; Pred. No.
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 14;
42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 369;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

PILE REFERENCE: 108827.135

CURRENT APPLICATION NUMBER: US/09/925,065A

CURRENT FILING DATE: 2001-08-08

PRIOR APPLICATION NUMBER: US 60/243,096

PRIOR FILING DATE: 2000-10-24

PRIOR APPLICATION NUMBER: US 60/252,147

PRIOR FILING DATE: 2000-11-20

PRIOR FILING DATE: 2000-11-30

PRIOR FILING DATE: 2000-11-30

GENERAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome

Sequence 539148, Application US/09925065A Publication No. US20040181048A1

```
닭
                                                                                                        S
                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens US-09-925-065A-539147
                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-01-05-09
NUMBER: OF SEO ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-925-065A-539147/c
; Sequence 539147, Application US/09925065A
; Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; ORGANISM: Homo sapiens US-09-925-065A-539146
US-09-925-065A-539148/c
                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 539147
LENGTH: 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 539146
LENGTH: 369
                                                                                                                                            Matches
                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 108827.135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                       238
                                                                                                 117 TGATTTAGAAGCAGAAGC 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              238 TGATTTAGAAGCAGAAGC 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  117 TGATTTAGAAGCAGAAGC 134
                                                                                                                                            18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   18;
                                                                       TGATTTAGAAGCAGAAGC 221
                                                                                                                                        Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative 0;
                                                                                                                                                                                3.2%;
                                                                                                                                        ; Score 18; DB
; Pred. No. 45;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 18;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                              DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 6;
                                                                                                                                                             45;
                                                                                                                                            <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                            Length 369;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 369;
                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                               US-10-301-480-42505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-301-480-42504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-301-480-42504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-925-065A-539148
                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: in the Human Genome
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 42504, Application US/10301480 Publication No. US20060057564A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 42504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 957086
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 539148
LENGTH: 369
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 42505
                                                                                                                                                                                                                                                                                     Sequence 42505, Application US/10301480 Publication No. US20060057564A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Wang, David G.

TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local (
                                                                                                    FILE REFERENCE: 108827.137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                      190 AAAATGATTCAAGCAAAT 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   238 TGATTTAGAAGCAGAAGC 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        117 TGATTTAGAAGCAGAAGC 134
                                                                                                                                                                                                                                                                                                                                                                                                            181 AAAATGATTCAAGCAAAT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.2%; Score 18;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۰,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   45
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      σ.
                                                                                                                                                                                                                           of Single Nucleotide Polymorphisms
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 369;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 476;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
```

```
Sequence 655914, Application US/10301480
Publication No. US20060057564A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
                                                                                                                                             ; ORGANISM: Homo sapien US-10-301-480-655914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-301-480-655913; Sequence 655913, Application US/10301480; Publication No. US20060057564A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 24
US-10-301-480-655914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapien US-10-301-480-655913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapien US-10-301-480-42505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 108827.137

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT FILING DATE: 2002-11-21

PRIOR APPLICATION NUMBER: US 10/215,598

PRIOR FILING DATE: 2002-08-09

PRIOR APPLICATION NUMBER: US 60/311,695

PRIOR FILING DATE: 2001-08-10

PRIOR FILING DATE: 2001-08-10

PRIOR FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 23
                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 655914
                                                              Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 655913
LENGTH: 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity 100. Matches 18; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                       TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                       ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity 100.0%; I es 18; Conservative 0;
190 AAAATGATTCAAGCAAAT 207
                                                                                                                                                                                       DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   190 AAAATGATTCAAGCAAAT 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181 AAAATGATTCAAGCAAAT 198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      190 AAAATGATTCAAGCAAAT 207
                                                                                                                                                                                                       476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAATGATTCAAGCAAAT 198
                                                                Conservative
                                                          3.2%; Score 18; DB
100.0%; Pred. No. 46
tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.2%; Score 18;
100.0%; Pred. No.
:ive 0; Mismatc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                      DB 10; Length 476;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 10; Length 476; 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 9;
46;
                                                                                                                                                                                                                                                                                                                                                                                                                                            of Single Nucleotide Polymorphisms
                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

Ś

밁

AAAATGATTCAAGCAAAT 198

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-925-065A-144381
                                Ş
                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-238954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-301-480-238954
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 238954
LENGTH: 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 238954, Application US/10301480 Publication No. US20060057564A1 GENERAL INFORMATION:
                                                                            Query Match
Best Local Similarity
Matches 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 144381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 144381, Application US/09925065A Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108627.137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT APPLICATION NUMBER: US/10/215,598
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR PILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens
-09-925-065A-144381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/09/925,065A CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/243,096 PRIOR FILING DATE: 2000-10-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/289,846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/252,147 PRIOR FILING DATE: 2000-11-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 108827.135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             307 ATCAAATTATCTTCCAAA 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     170 ATCAAATTATCTTCCAAA 187
                                      170 ATCAAATTATCTTCCAAA 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity 100.0%;
                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                              3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     957086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.2%; Score 18;
100.0%; Pred. No.
                                                                            ,
,
                                                                                                Score 18; DB
Pred. No. 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0; Mismatches
                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 6;
                                                                                                                   10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 498;
                                                                                                                 Length 507;
                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
```

```
RESULT 29
US-10-301-480-310232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapien US-10-301-480-310231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-301-480-852363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-301-480-310231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-301-480-852363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 852363 Application US/10301480
Publication No. US20060057564A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: In the Human Genome
FILE REFERENCE: 10827.137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
COPTEMBER FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
Sequence 310232, Application US/10301480
Publication No. US20060057564A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 310231
LENGTH: 509
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 852363
LENGTH: 507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 310231, Application US/10301480 Publication No. US20060057564A1
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Wang, David G.
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2002-08-09
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: Fast-SEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.0%; | 1es 18; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
les 18; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DNA
                                                                                                                                                                                                                                                                                                               391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                488 GATAATTCTAGAATTTCA 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               316 ATCAAATTATCTTCCAAA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170 ATCAAATTATCTTCCAAA 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.2%; Score 18; ilarity 100.0%; Pred. No. Conservative 0; Mismatcl
                                                                                                                                                                                                                                                                                                                                                                                 3.2%; Score 18; DB
100.0%; Pred. No. 46
ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10; Length 507;
                                                                                                                                                                                                                                                                                                                                                                                                                                DB 10; Length 509;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ٥,
                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>0</u>
```

```
Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                  US-10-301-480-923641
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapien US-10-301-480-923640
                                                                                                                                                                                                                                                                                                                                                                         RESULT 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-301-480-923640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-310232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
                                                                                                                                                                                                                                                                              Sequence 923641, Application US/10301480 Publication No. US20060057564A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 312332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 923640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 923640, Application US/10301480 Publication No. US20060057564A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 923641
                                    CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR PPLICATION NUMBER: US 60/311,695
PRIOR PPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
                                                                                                                                                                                                       APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-99
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/301,480 CURRENT FILING DATE: 2002-11-21
                                                                                                                                                                                                FILE REFERENCE: 108827.13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/301,480 CURRENT FILING DATE: 2002-11-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 108827.137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                         488 GATAATTCTAGAATTTCA 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        488 GATAATTCTAGAATTTCA 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.2%; Score 18; DB 10; llarity 100.0%; Pred. No. 46; Conservative 0; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1226818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 10; Length 509,
. 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 509;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 33
US-10-301-480-497941
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo sapiens 
US-09-925-065A-436208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 32
US-09-925-065A-436208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapien US-10-301-480-923641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR PILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
PRIOR PILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR PILING DATE: 2001-05-09
                                                          APPLICANT: Wang, David G.

TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827:137
CURRENT APPLICATION NUMBER: US/10/301,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
PRIOR FILING DATE: 2002-08-09
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR APPLICATION NUMBER: US 60/311,695
PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 436208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 436208, Application US, Publication No. US20040181048A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                Sequence 497941, Application US/10301480 Publication No. US20060057564A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: 108827.135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 957086
ORGANISM: Homo sapien
                            LENGTH: 522
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ENGTH: 512
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 / Match
Local Similarity 100.0%; P
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity 100.0%; |
les 18; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   334 GATAATTCTAGAATTTCA 351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    488 GATAATTCTAGAATTTCA 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Application US/09925065A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.2%; Score 18;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 18;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 10;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 512;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 35
US-09-925-065A-225679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-1111350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 34
US-10-301-480-1111350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-301-480-497941
                                         US-09-925-065A-225679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Publication No. US20060057564A1
GENERAL INFORMATION:
APPLICANT: Warning
                                                                                                                                                                                                                                                                                                                                                               Sequence 225679, Application US/09925065A
Publication No. US20040181048A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nuclectide Polymorphisms in the Human Genome
FILE REFERENCE: 108827.135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
EDITOR APPLICATION NUMBER: US/09/925,065A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1111350
LENGTH: 522
                                                                                                                 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 225679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILE REFERENCE: 108827.137

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT FILLING DATE: 2002-11-21

PRIOR APPLICATION NUMBER: US 10/215,598

PRIOR PILING DATE: 2002-08-09

PRIOR APPLICATION NUMBER: US 60/311,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
PRIOR PRIOR FILING DATE: 2001-01-16
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR APPLICATION NUMBER: US 60/289,846
                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/243,096 PRIOR FILING DATE: 2000-10-24
                                                                                                                                                       NUMBER OF SEQ ID NOS:
                                                                                                                                                                           PRIOR FILING DATE:
                                                     TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                 LENGTH: 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           344 GATAATTCTAGAATTTCA 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344 GATAATTCTAGAATTTCA 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.2%; bud. nu.
y 100.0%; Pred. nu.
y nismatches
                                                                                                                                                                         2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                         957086
3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.2%; Score 18;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches
 Score 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
47;
 DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10;
 6,
 Length 524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 522;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
ORGANISM: Homo sapiens
```

```
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 10827.135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR APPLICATION NUMBER: US 60/252,092
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR APPLICATION NUMBER: US 60/250,766
PRIOR APPLICATION NUMBER: US 60/261,766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens 
US-09-925-065A-225680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 36
US-09-925-065A-225680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-925-065A-398800
SEQ ID NO 398800
LENGTH: 549
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastS
SEQ ID NO 225680
LENGTH: 524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 398800, Application US/09925065A
Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 225680, Application US/09925065A Publication No. US20040181048A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Nucleotide Polymorphisms in the Human Genome
FILE REFERENCE: 108827, 135
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT APPLICATION NUMBER: US/09/925,065A
CURRENT FILING DATE: 2001-08-08
PRIOR APPLICATION NUMBER: US 60/243,096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2000-10-24
PRIOR APPLICATION NUMBER: US 60/252,147
PRIOR FILING DATE: 2000-11-20
PRIOR APPLICATION NUMBER: US 60/250,092
PRIOR FILING DATE: 2000-11-30
PRIOR FILING DATE: 2000-11-30
                                                                                             PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
PRIOR FILING DATE: 2001-05-09
NUMBER OF SEQ ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS: 957086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/261,766
PRIOR FILING DATE: 2001-01-16
PRIOR APPLICATION NUMBER: US 60/289,846
                                                                        SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-05-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       391 GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              503 GATAATTCTAGAATTTCA 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     503 GATAATTCTAGAATTTCA 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAATTCTAGAATTTCA 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 18;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 6;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 524;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

```
밁
                               S
                                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-1079602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 39
US-10-301-480-1079602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo sapien
US-10-301-480-466193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-301-480-466193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-925-065A-398800
                                                                                                                                                                                                                                                                                                Sequence 1079602, Application US/10301480
Publication No. US20060057564A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identifiction and Mapping of Single Nucleotide Polymorphisms
TITLE OF INVENTION: in the Human Genome
FILE REFERENCE: 108827.137
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US/10/31,480
CURRENT FILING DATE: 2002-11-21
PRIOR APPLICATION NUMBER: US 10/215,598
                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1079602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match 3.2%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQ ID NO 466193
LENGTH: 562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 466193, Application US/10301480 Publication No. US20060057564A1 GENERAL INFORMATION:
                                                                                      Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/301,480 CURRENT FILING DATE: 2002-11-21 PRIOR APPLICATION NUMBER: US 10/215,598 PRIOR FILING DATE: 2002-08-09 PRIOR APPLICATION NUMBER: US 60/311,695
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2001-08-10
NUMBER OF SEQ ID NOS: 1226818
SOFTMARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wang, David G.
TITLE OF INVENTION: In the Human Genome
FILE REFERENCE: 108827.137
                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: US 60/311,695 PRIOR FILING DATE: 2001-08-10
                                                                                                                                                                                         LENGTH: 562
                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                   209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 209 TIGGAGTGATTGTAAATG 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   209 TTGGAGTGATTGTAAATG 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              69 TTGGAGTGATTGTAAATG 86
 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  69 TTGGAGTGATTGTAAATG 86
                                                                       18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
TTGGAGTGATTGTAAATG 86
                    TTGGAGTGATTGTAAATG 226
                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.2%; but
100.0%; Pr
                                                                                    3.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.2%; Score 18; DB 10; 100.0%; Pred. No. 47;
                                                           0;
                                                                                    Score 18; DB 10; Pred. No. 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 18; DB 6; Pred. No. 47;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 549;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 562;
                                                                                                     Length 562;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                   <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
밁
                                                                                                                                         8
Search completed: April 12, Job time : 2296.11 secs
                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo sapien 
US-10-301-480-303856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-301-480-303856
                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 1226818
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 303856
LENGTH: 573
                                                                                                                                                                                          Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 303856, Application US/10301480 Publication No. US20060057564A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, David G.

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide Polymorphisms

TITLE OF INVENTION: in the Human Genome

FILE REFERENCE: 108827.137

CURRENT APPLICATION NUMBER: US/10/301,480

CURRENT FILING DATE: 2002-11-21

PRIOR APPLICATION NUMBER: US 10/215,598

PRIOR FILING DATE: 2002-08-09

PRIOR FILING DATE: 2002-08-09

PRIOR APPLICATION NUMBER: US 60/311,695

PRIOR FILING DATE: 2001-08-10

PRIOR FILING DATE: 2001-08-10
                                                                                                                                                                              Local bi
                                                                                              543 TTTTAGAAGATCATATGG
                                                                                                                                           227 TTTTAGAAGATCATATGG 244
                                                                                                                                                                                     h 3.2%; Score 18; DB 10; Length 573; Similarity 100.0%; Pred. No. 47; 18; Conservative 0; Mismatches 0; Indels
                      2006, 07:07:31
                                                                                              560
                                                                                                                                                                                          0
                                                                                                                                                                                          Gaps
                                                                                                                                                                                          0
```

THIS PAGE BLANK (USPTO)

C 1 21 3.8 346 9 AQ237761 C 2 21 3.8 436 1 AW069787 C 3 21 3.8 557 9 CE052269 4 21 3.8 559 5 BW864686 C 5 21 3.8 582 8 DR421506 C 6 21 3.8 639 10 CE35239 C 7 21 3.8 637 10 CE35238 C 9 21 3.8 637 11 CR825238 C 10 20 3.6 208 2 BF475913 C 11 20 3.6 208 2 BF475913 C 11 20 3.6 326 8 CX630648 C 13 20 3.6 326 8 CX630648 C 14 20 3.6 398 9 AQ837728 C 16 20 3.6 398 9 AQ837728 C 17 20 3.6 480 7 CN846247 17 20 3.6 586 2 BE665726 C 19 20 3.6 556 3 BM289207 C 19 20 3.6 556 3 BM289207 C 19 20 3.6 587 5 BW25953 C 22 20 3.6 599 8 DT014963	Database: EST:* 1: gb_est1:* 2: gb_est2:* 3: gb_est3:* 4: gb_htc:* 5: gb_est4:* 6: gb_est6:* 7: gb_est6:* 9: gb_est7:* 9: gb_gss1:* 10: gb_gss2:* 11: gb_gss2:* 11: gb_gss3:* Pred. No. is the number of results predicted by changes or greater than or equal to the score of the result and is derived by analysis of the total score distrilland is derived by analysis of the total score distrilland. Score Match Length DB ID ** ** ** ** ** ** ** ** **	GenCore version 5.1.7 Copyright (c) 1993 - 2006 Biocceleration Ltd. OM nucleic - nucleic search, using sw model Run on: April 11, 2006, 16:27:36; Search time 7710.45 Secon (without alignments) 3398.084 Million cell upd Perfect score: 560 Sequence: 1 acaactggtacatctgcgcgggagcaatgagaattacacg Scoring table: OLIGO_NUC Gapop 60.0, Gapext 60.0 Searched: 41078325 seqs, 23393541228 residues Word size: 1 Total number of hits satisfying chosen parameters: 82156240 Minimum DB seq length: 0 Maximum DB seq length: 0 Maximum DB seq length: 1 Total processing: Listing first 1000 summaries
AQ237761 RPCIII-64 AW069787 Cr50e08.x CE052529 tigr-gss- BW864686 BW864686 DR421506 CCHS7E08 AQ237789 RPCIII-64 CE351611 tigr-gss- CR825238 GR0AA568 DN590945 92028.1 L BF475913 naa14e07. AG191545 Pan trogl CX630648 GNW001F05 CX630648 GNW001F05 CX630668 GNW001F01 BB645247 PG07010F1 BB665726 154863 MA BF843865 MR7-HT118 CN8446247 PG07010F1 BB665726 154863 MA AQ702954 HS 5443 B BW220108 BW220108 BW355953 BW355953 DT014963 VVI094G04	by chance to have a he result being printed, distribution. Description	on Ltd. 10.45 Seconds ments) on cell updates/sec agaattacacg 560
CCC C C C 775 A C C C C C C C C C C C C C C C C C C	0 0 0 0 00 00 00 00 00 00 00 00 00 00 0	00000000000000000000000000000000000000
		650 652 721 721 721 727 727 727 727 727 727 815 974 1175 1175 1175 1175 123 123 123 123 123 123 123 123 123 123
7 CN351367 7 CN052069 7 CV052069 7 CV0774204 7 CN774204 7 CN570332 8 DN81679 9 BH269965 9 CCN57111 9 BZ295130 9 CCN577760 9 CCN577760 9 CCN577760 9 CCN57057 10 CN57057 10 CN57057 10 CN57057 10 CN57057 10 CN57057 10 CN57057 10 CN57057 11 CN57057 12 CN57057 13 CN57057 14 CN57057 15 CN57057 16 CN57057 17 CN57057 18	7 CR79240 3 B1428905 6 CD860340 1 A1588145 1 A1588145 1 AWS27707 7 CR536667 7 CR536667 7 CR532415 10 CL91556 BY479743 5 BY479743 5 BY479743 10 CR74267 10 CR74267 10 CR74267 10 CR74267 10 CR74267 10 CR74267 10 CR74267 11 ALP11634 11 CR492456 11 ALP11634 12 CR492456 12 CR492456 13 ALP11634 14 CR492456 15 ALP11634 16 CR492456 17 CR492456 18 CR492466 18 CR492466 18 CR492466 18 CR492466 18 CR492466 18 CR492466 18	10 CL347309 8 DT014681 1 AF062715 1 AI110607 10 AG594544 9 BE717132 9 CC855874 6 CB55874 6 CB55874 7 CB1315574 5 BI315574 5 BI315574 5 BI315574 6 BE695762 7 CC0174612 8 BI3134176 1 AW466723 7 CCN571020 1 AW466723 7 CN571020 1 AW466723
CN351367 17000424 AQ724199 HS 2102 AQ724199 HS 2102 CV052069 EST 1151 CN7774204 taf59907 CN570332 tag39b07 DN812679 ACAC-aac BH269965 CH230-6M CN557111 tae40912 BZ295130 CG1309: BZ295130 CG1309: BZ295130 CG1309: CN777760 tad84a05 CN5777760 tad84a05 CN5777760 tad84a05 CN5777760 tad84a05 CN57647 MMSP0048 DN636458 ACAC-aab BM636458 ACAC-aab BM636458 ACAC-abc CN570542 tag39b07 CN570542 tag39b07 CN570542 tag39b07 CN570542 tag39b07 CN570543 CH2670544 CR105986 1044 475 CA257783 SCCCFL11 BX184039 Danio abc DN242601 ACAD-aab BZ038035 oeh88a07	HQ628382 Bap46C07 CR792402 DKPZp4600 BI428905 fr69all.x CD860340 TE.002C14 A1588145 fb95g03.x BI706193 fq02e05.y CW411105 fabb001f1 AW527707 UI.R-BT1- CR536667 DKFZp459C CW632415 taf17d06. CL915556 OA, ABA001 BY479743 BY479743 AW154791 fi32h02.x CR774267 DKFZp459L BE941710 EST421289 BI706265 fq03e05.y AL911634 AL911634 CN492456 Mdfw2011f AQ245104 HS_2059 A CN663288 tae05c04 CA815338 CA1281203 CN351364 170005316	CL347309 RPCI44 2 AF062715 AF062717 AF0

164 165 166 167	c 161 c 162 c 163		c 156	153 154	151 152	C 149		145	וער	نحم	139	137 138	134 135	c 133	129	127 c 128	125 126	123 124	121 122	119 120	117 118	116	114			C 108	106	104	103	c 100	998	c 97
18 18 18	18 18	18 18	1 1 9	19	19	19	19	19	19	19	1 19 5	19	19	19	19	19	19	19	19 19	19 19	19	19	19	19	19	19	19	19 19	19	19	19	19
						ωω. 	ωω . 4. 4	ωω 		 	 	 	 	 	υ ω 4 4	33,	ωω • •	 4. 4.	ω ω 4.4	ωω • •	ωω • •	3.4	3.4.4		. ω ι 	. ω ι 	υ ω ι 	ωω 	ωι 	ωυ. 44.	ω. 4.4.	3.4
271 287 300																																
3 BJ009744 9 AZ886797 9 BP678541 1 AV183805 5 C32746																																
BJ009744 BJ009744 AZ886797 RPCI-23-1 BP678541 BP678541 AV183805 AV183805 C33746 C33746 Vinit	BP715548 BP715548 CB333333 py43e06.y AI474789 tm36e11.x	CK893599 SGP133689 AW530561 UI-R-BT1-	CR857812 Pongo pyg AF149543 AF149543	CR859011 Pongo pyg CR859512 Pongo pyg	AY402219 Homo sapi CR860890 Pongo pyg	AG448708 Mus muscu	BM478977 AGENCOURT CC238784 CW261-81N	BM910627 AGENCOURT	CNS11269 AGENCOURT BOOK7812 AGENCOURT	CL735987 OR BBa006	CV198398 CGF100350	BQ883066 AGENCOURT BQ718140 AGENCOURT	CV196635 CGF100350 BQ705428 Y1A20H04-	B1600685 603247574 BQ425754 AGENCOURT CX703844 qmrtDrNS0	CZ205599 AIAA-aag5 CL654647 PRI0121a_	CV198003 CGF100395 CA815434 CA12EI203	CV198123 CGF100396 BZ124165 CH230-451	CV198649 CGF100397	CL82921 OR CBa005 CX667260 HCRCP01 0	CV197687 CGF100395 CF445491 EST681836	CV194625 CGF100334 CV196340 CGF100349	CV565071 taj71c02. BG707512 602670751	AG490779 Mus muscu CV195412 CGF100343	CC364706 PUHKC47TB	CR826277 GROADSCC	CW528169 OP mus cu	DT041366 Mcrtp1010	AI725481 BNLGHi122	CN351363 170005321 CV195898 CGF100344	CE722100 tigr-gss- BI967289 GM830001A	CA266323 SCAGLB204 BH930813 odi65e11.	AQ287877 nbxb0031D
													· <u>-</u>																		<u>-</u> -	
C 233 2238 240	C C 23 20 00 00 00 00 00 00 00 00 00 00 00 00	C 231	2 2 2 2 8 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9	C 226 227	224 225	222	220	218	216	214	212	c 209 210		204 205	202	c 200 201		196	194	c 192	190 191	c 188 189	c 186 187	185		181	179	177	175 176	c 173 c 174	171 172	170
	234	232	- سر بـر ـ	226 1		بر بر د	بر دبر د	ے بے نہ	ے بے د		. p. p	210 1	207 1 208 1		بر بر	200 1	198 1	ر بر د	ر در د	192	ب د	188 1 189 1	186 1 187 1	185 1	183			- سر د		173 1 174 1		170 1
237 18 3. 238 18 3. 239 18 3. 240 18 3.	234 18 3. 235 18 3. 236 18 3.	231 18 3. 232 18 3.	1683.	226 18 3. 227 18 3.	18 3.	1860 1860	1000	1880 1800	188 3.	1883.	188	209 18 3. 210 18 3.	207 18 3. 208 18 3.	188 3.	18 3.	200 18 3. 201 18 3.	198 18 3.	1000	188 3.	192 18 3.	18 3.	188 18 3. 189 18 3.	186 18 3. 187 18 3.	184 18 3. 185 18 3.	183 18 3.	188 3.	18 3.	18 3.	18 18 3.	173 18 3. 174 18 3.	18 3.	170 18 3.
237 18 3.2 452 238 18 3.2 453 239 18 3.2 453 240 18 3.2 453 240 18 3.2 455 241 18 3.2 455	234 18 3.2 445 235 18 3.2 451 236 18 3.2 451	231 18 3.2 439 232 18 3.2 442	18 3.2 438 18 3.2 438	226 18 3.2 436 227 18 3.2 438	18 3.2 433 18 3.2 435	18 3.2 430	18 3.2 430	18 3.2 425	18 3.2 420	18 3.2 414	18 3.2 412 18 3.2 412	209 18 3.2 410 210 18 3.2 411	207 18 3.2 408 208 18 3.2 410	18 3.2 401 18 3.2 403	18 3.2 400 18 3.2 401	200 18 3.2 395 201 18 3.2 399	198 18 3.2 391	18 3.2 390	18 3.2 386	192 18 3.2 380	18 3.2 376	188 18 3.2 370 189 18 3.2 371	186 18 3.2 370 187 18 3.2 370	184 18 3.2 354 185 18 3.2 359	182 18 3.2 353 183 18 3.2 353	18 3.2 347 18 3.2 350	18 3.2 345	18 3.2 337	18 3.2 324 18 3.2 329	173 18 3.2 320 174 18 3.2 321	18 3.2 317 18 3.2 318	170 18 3.2 307
237 18 3.2 452 6 CA673959 238 18 3.2 453 1 AI391514 238 18 3.2 453 1 AI391514 239 18 3.2 453 8 H08955 240 18 3.2 455 2 BF59951 241 18 3.2 455 2 BF59951	234 18 3.2 445 3 234 18 3.2 451 10 236 18 3.2 451 10	231 18 3.2 439 9 BZ52354 231 18 3.2 439 9 BZ52354 232 18 3.2 442 6 CF80389	18 3.2 438 3 BP61689 18 3.2 438 9 BH12285	226 18 3.2 436 7 CF97105 227 18 3.2 438 3 BJ13434	18 3.2 433 9 AQ03636 18 3.2 435 1 AV79487	10 3.2 430 5 EFG1207 18 3.2 430 6 CB12197 18 3.2 430 1 AW73557	16 3.2 430 1 AVC1621	16 3.2 425 8 R60616	18 3.2 420 1	18 3.2 41.3 8 H129/3 18 3.2 414 3 BP78417	18 3.2 412 1 AV81019 18 3.2 412 9 BH21342	209 18 3.2 410 9 BH04210 210 18 3.2 411 6 CF80384	207 18 3.2 408 7 208 18 3.2 410 7	18 3.2 401 10 CW4706 18 3.2 403 10 CW1112 18 3.2 405 1 AV81935	18 3.2 400 8 D47180 18 3.2 401 2 BG379700	200 18 3.2 395 11 201 18 3.2 399 1	190 18 3.2 391 9 BZ8940	18 3.2 390 7 CV3683	18 3.2 386 9 CC89051	192 18 3.2 380 7 193 18 3.2 383 6	18 3.2 376 2 BG18739	188 18 3.2 370 2 BE66938 189 18 3.2 371 8 R60603	186 18 3.2 370 1 187 18 3.2 370 2	184 18 3.2 354 1 AU2/823 185 18 3.2 359 8 T23676	183 18 3.2 353 10	18 3.2 347 6 CHI2066	18 3.2 345 7	18 3.2 337 8 L13819	18 3.2 324 6 CA99550 18 3.2 329 8 CX56982	173 18 3.2 320 10 AG1961 174 18 3.2 321 10 CE5344	18 3.2 317 1 18 3.2 318 6	170 18 3.2 307 9 AQ06761
237 18 3.2 452 6 CA673959 238 18 3.2 453 1 AI391514 239 18 3.2 453 8 H08955 240 18 3.2 455 2 BF598651 241 18 3.2 455 2 BF598651	23 16 3.2 445 AZ598764 234 18 3.2 445 AZ598764 235 18 3.2 451 10 CW480904 236 18 3.2 451 10 CW480905	230 18 3.2 439 9 BZ523548 232 18 3.2 439 9 BZ523589 232 18 3.2 442 6 CF80389 1	18 3.2 438 3 BP616890 18 3.2 438 9 BH122858 18 3.2 438 0 NCO20027	226 18 3.2 436 7 CF971057 227 18 3.2 438 3 BJ134348	18 3.2 433 9 AQ036363 18 3.2 435 1 AV794871	16 3.2 430 6 CB121971 18 3.2 430 6 CB121971 18 3 2 433 1 AW735573	18 3.2 430 1 AV010439	18 3.2 425 8 R60616	18 3.2 420 1 AV520444 18 3.2 420 1 AV520444	18 3.2 413 8 H129/3 18 3.2 414 3 BP784170	18 3.2 412 1 AV810499 18 3.2 412 9 BH213420	209 18 3.2 410 9 BH042103 210 18 3.2 411 6 CF803846	207 18 3.2 408 7 CF890289 208 18 3.2 410 7 CN570245	18 3.2 401 10 CW470659 18 3.2 403 10 CW111224 18 3.2 405 1 AVB19351	18 3.2 400 8 D47180 18 3.2 401 2 BG379700	200 18 3.2 395 11 CR876482 201 18 3.2 395 1 AV812241	198 18 3.2 391 1 B789003	18 3.2 390 7 CV368381	18 3.2 386 9 CC890518	192 18 3.2 380 7 CN571335	18 3.2 376 2 BG187396	188 18 3.2 370 2 BE669385 189 18 3.2 371 8 R60603	186 18 3.2 370 1 AIO38592 187 18 3.2 370 2 BG735574	184 18 3.2 354 1 AUZ/8232 185 18 3.2 359 8 T23676	183 18 3.2 353 8 100248 183 18 3.2 353 10 CZ645374	18 3.2 350 1 AU233831	18 3.2 345 7 CR451235	18 3.2 337 8 L13819	18 3.2 324 6 CA995503 18 3.2 329 8 CX569827	173 18 3.2 320 10 AG196104 174 18 3.2 321 10 CE534475	18 3.2 317 1 AA744266 18 3.2 318 6 CD552314	170 18 3.2 307 9 AQ067615
237 18 3.2 452 6 CA673959 238 18 3.2 453 1 AI391514 238 18 3.2 453 1 AI391514 239 18 3.2 453 8 H08955 240 18 3.2 455 2 BF59951 241 18 3.2 455 2 BF59951	23 16 3.2 445 AZ598764 234 18 3.2 445 AZ598764 235 18 3.2 451 10 CW480904 236 18 3.2 451 10 CW480905	230 18 3.2 439 9 BZ523548 232 18 3.2 439 9 BZ523589 232 18 3.2 442 6 CF80389 1	18 3.2 438 3 BP616890 18 3.2 438 9 BH122858 18 3.2 438 0 NCO20027	226 18 3.2 436 7 CF971057 227 18 3.2 438 3 BJ134348	18 3.2 433 9 AQ036363 18 3.2 435 1 AV794871	16 3.2 430 6 CB121971 18 3.2 430 6 CB121971 18 3 2 433 1 AW735573	18 3.2 430 1 AV010439	18 3.2 425 8 R60616	18 3.2 420 1 AV520444 18 3.2 420 1 AV520444	18 3.2 413 8 H129/3 18 3.2 414 3 BP784170	18 3.2 412 1 AV810499 18 3.2 412 9 BH213420	209 18 3.2 410 9 BH042103 210 18 3.2 411 6 CF803846	207 18 3.2 408 7 CF890289 208 18 3.2 410 7 CN570245	18 3.2 401 10 CW470659 18 3.2 403 10 CW111224 18 3.2 405 1 AVB19351	18 3.2 400 8 D47180 18 3.2 401 2 BG379700	200 18 3.2 395 11 CR876482 201 18 3.2 395 1 AV812241	198 18 3.2 391 1 B789003	18 3.2 390 7 CV368381	18 3.2 386 9 CC890518	192 18 3.2 380 7 CN571335	18 3.2 376 2 BG187396	188 18 3.2 370 2 BE669385 189 18 3.2 371 8 R60603	186 18 3.2 370 1 AIO38592 187 18 3.2 370 2 BG735574	184 18 3.2 354 1 AUZ/8232 185 18 3.2 359 8 T23676	183 18 3.2 353 8 100248 183 18 3.2 353 10 CZ645374	18 3.2 350 1 AU233831	18 3.2 345 7 CR451235	18 3.2 337 8 L13819	18 3.2 324 6 CA995503 18 3.2 329 8 CX569827	173 18 3.2 320 10 AG196104 174 18 3.2 321 10 CE534475	18 3.2 317 1 AA744266 18 3.2 318 6 CD552314	170 18 3.2 307 9 AQ067615

÷

		0 0 0 0 0 0 0 0 2 0 0 0 0 0 0 0 0 0 0 0	271 271 272 273 274 276 277 278 279 279 281 283	C C C C C C C C C C C C C C C C C C C	0 0 0 20 0 0 20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
18 18 18 18 18 18	18 18 18 18	18 18 18 18 18 18 18	1 8 8 8 1 1 1 1 8 8 1 1 1 1 1 1 1 1 1 1	18 18 18 18 18 18 18	
					460 461 461 461 462 462 463 466 466 468 468 468 468 468
					B D47858 5 B0625858 6 CA073251 6 CA523919 6 CD811731 8 N96690 10 CE29262 2 BE899890 2 BE899890 2 BE899890 2 BE899880 3 RA310422 7 CF899684 8 R16271 3 R16271 3 R16271 3 R16271 5 R6674439 10 CE474439
AA460718 zx69g01.8 AQ127273 HS 3033 B AV954654 AV954654 BE683086 181561 MA CR340401 mte1-72E2 AU219818 AU219818 AV957477 AV957477 CD818845 BU20.047A AU215224 AU215224 AG622449 HS 5214 B AQ283376 RPCI11-89	CF303078 ABF101- BJ009214 BJ009214 CO551383 LyEST9862 CB423606 597065 MA AZ619876 LM0452P18 BM854648 K-EST0137 COB84223 BOVGen 12 AI769648 wj25c01.x	BJ524169 BJ524169 CF82586 EST703248 CK893627 SGP153719 BP039887 BP250025A BF045364 BP250025A BI471522 88921e02. BJ732047 BJ732047 BZ5973 TJA4TF TAMU CC133762 NDL.71F22 BF044189 BP250012B CR4519703 KS10029B0 CR493595 f8bb001f2	A139191 48605H04 A139191 48605H04 A2967344 2M023BD14 BB703898 BB703898 AA605392 30428 Lam BI510714 BB160003A BJ007787 BJ007787 CO877190 BovGen 05 AW618525 EST320511 BJ008103 BJ008103 BJ009383 BJ009383 GK744146 eca01 3cs AQ223808 HS 2218 A BE106088 UI-R-B0I-	BI538205 428640 MA CA870707 K0904D09- CA903113 PCS02549F BF044692 BP250010A CD843182 RF02.130N BJ733550 BJ733551 BJ733551 BJ733551 CD822333 BN25.044N CW294029 104 774 1 CF980072 rg84706. CW221830 AUZ21830 CD817719 BN20.0420 AM034566 AM034566	D47858 RICS13586A BQ625858 Bp93g09 y CA073251 SCEPAM105 CA523919 KS12030C1 CD811731 BN10.001K N96690 21493 CD4-1 CE226259 tigr-956- BE899890 181560 MA BQ626319 ph96d09 y AZ310422 1M0025E21 CF899684 A0306B07- R16271 ya48c08.r1 BQ345320 RC5-NT026 CE474439 tigr-956- BF251598 EST418947
	369 370 371 372 372 373 374 375	3 5 5 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
					18 11 18 18 18 18 18 18 18 18 18 18 18 1
					572 3 572 3 572 3 576 10 578 3 579 10 579 1 581 1 582 1 588 3 588 3 588 3
	CE389744 AU212632 CA240976 CD818270 BJ037180 CD812327 AG034328 AU211923	CD820120 BJ031963 BG181278 BG181278 AV997156 CD8195480 CD81993 BE427379 BH824780 BB661935 BB661935 BJ391498 CPA5620		CBAH DAZ BONG 22	BJ B
BJ795 DR004 BM963 CD888 CM033 CW16 CE55 CD905 CD905 CX466 BW346	CE3 AU21 CA24 CD81 BJ03 CD81 AG0 AU21	CD820 BJ031 BG181 RQ197 BQ095 CD811 BE427 BE427 BB661 AU238 AU238 AJ56	CD816121 B BJ310536 B AJ212088 A AZ217259 R CZ100500 BG572359 6 CV219734 E BB662275 B BF024176 P CZ497483 BF298723 0 BF298723 0 BJ217178 B BJ217178 B	CV21 W288 AJ5 CB 43 DN46 DN46 AZ44 AZ44 AZ44 AZ48 DB60 BH03 AV95	BI70 BJ72 BP27 CW2 BJ49 BJ49 BJ49 BJ49 BJ49 BJ49 BJ49 BJ49

0 0																																			
44444 00000000000000000000000000000000	4 4 5 5 5 4 5 5 5 5 4 5 5 6	100 144 100 100 100 100 100 100 100 100			443 444	C 441 442	C 439 440	437	C 436				C 428		C 425	423	C 421	C 419	417	C 415	C 413		c 409		406	0 404 405	402	401	c 399	398		394 395	392 393	C 390	
1 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8																							18 18	18	100	18 18	18 18	18	18	18	18	18 18	18 18	18	100
																													•						
720 721 723 723	717 718 718	715 715	713 714	709	708	707 707	704 704	700	699	8698	698	696 696	696 696	694	693	069	689	687	0 8 6	0 00 0	682	679	677 678	672 674	670	670	669 869	668	667	ი ი ი ი ი	665	665 665	663 3	660	659
3 G & B B G S	10 B.A.	: '3 t	4 C C	11	9 DF	100	ر د د د	90 CE	; 7 t		1 6 A1CI	9 B2	8 G	10 4	2 2	2 E	0 P	106	120 120	3 C S	200	.ω 	10 7	9 BX	(C)	2 BE	10 B	ω υ Β.Β.	υ ω Β <u>Β</u>	2 2 3	. u c	ა ა <u>წ</u> წ	8 G 9 9	10 CE	
CD639586 BU442353 BW313478 CF824965	150193 (G338166	7842041 7842041 78029106	IS09AJZ IZ15218	R876426 E108065	597590 955156	W175990 W620110	633154 W276852	E356566	048271	934721	872302 612522	020083 R478545	861812	E371987	100014	440198	834482	W183193	982799	817887	816430	798362	033854 E765462	423550	192791	817001	G913896	794731	659051	W588841	812311	818031 775322	306233	819000 E377546	4839
CF824965 ENTPO2347	AU2168 BJ1501 AG338	CV8420 CW029	BX0497 CN2152	CR876	DR5975	CW175	CX6331	CE356 CF4348	CO0482	BI9347	CD8723	BZ0200	CX8357	AU2164 CE371	BX1000	AG056 BG4401	CX8344	CW183	AV9827	CD8178	DN8164	BJ7983	CN0338	BW0343	CA1927	BB6165	BW2527	BJ7947	BJ6590	CX8357	BJ8123	BJ8180	CF3062:	CD8190	CE483
86 AGEN 83 6030 78 BW31	93 BJ15	106 100 11 IDO	55 Sing	126 Sus	O ESTS	990 104	54 taj: 352 104	66 tic	71 Lr_1	21 ESTS	DZ AZOZ	33 oei] 545 mtl	L2 AZO1	987 tig	14 BX1	98 GA	32 ACAC	193 104	99 AV9	37 BN20	30 ACAC	52 BJ79	54 Math	34 BW03	91 SCRI	18 BB61	396 ZMN	31 BJ79	51 BJ6	28 ACAC	11 BJ81	31 BJ81	94 ABF-	00 BN20	990 tig
NCOURT NCOURT 019167 13478	50193 muscu	1_256_	gle re	zias	987718 221G10	AB 301	39g04. 1750	3r-gss 571191	PAHCF_	554610	2.120F	13d01. 12-1880	L.0030 C-aaal	16464 Jr-988	00014	Ea000	[03- [-aaa3	- 1599_	32799	0.0431	C-aab9	98362	1 6 L1	34334)e12.g	SB104	17001	52739 1BBb03	94731	1506	1-aaa6 ABa01:	12311	18031	03- 05-K).047I gr-gss	r-988
										_																									
Ω	n	ı										n			იი					n				a	ć	2		a	(ດດ			n	α	
			520 521	518 519	516 517	515 517 517	512 513	510 511	509	507	л (л () () ()		501 502	500 500			493 494	492	490		486	484	482 483				475 476				469				462
532	525 526 1	523 524 1			,	ر بر ب	_	ע ע	ـر ســر	, LJ	ر بر بـ	503 1 504 1			498 1	495		₽ ⊢		488 1	ر در د	ربرد	سر بہ	480 1 481 1	479	477 1		474 1	472	470 1 471 1		467 1 468 1	465 1 466 1	463 1 464 1	- -
529 18 3. 530 18 3. 531 18 3. 532 18 3.	525 526 18 527 18	522 18 3. 523 18 3. 524 18 3.	18 18 3.	18 3.	18 3.	1883.	18 3. 18 3.	18 3. 18 3.	18 3.	1000	188 3.	503 18 3. 504 18 3.	18 18 3.	18 18 3.	497 18 3. 498 18 3.	495 18 3. 496 18 3.	18 3. 18 3.	18 3.	18 3.	488 18 3.	1000	188	18 3.	480 18 3. 481 18 3.	479 18 3.	477 18 3.	18 18 3.	474 18 3.	472 18 3.	470 18 3. 471 18 3.	18 3.	467 18 3.	465 18 3. 466 18 3.	463 18 3. 464 18 3.	18 3.
529 18 3.2 530 18 3.2 531 18 3.2 532 18 3.2	525 18 3.2 526 18 3.2 527 18 3.2	522 18 3.2 523 18 3.2 524 18 3.2	18 3.2 18 3.2	18 3.2 18 3.2	18 3.2 18 3.2	188 3.2	18 3.2 18 3.2	18 3.2 18 3.2	18 3.2	1000	188 3.2	503 18 3.2 504 18 3.2	18 3.2 18 3.2	18 3.2 18 3.2	497 18 3.2 498 18 3.2	495 18 3.2 496 18 3.2	18 3.2 18 3.2	18 3.2	18 3.2	488 18 3.2 488 3.2	1000	188 3.2	18 3.2	480 18 3.2 481 18 3.2	479 18 3.2	477 18 3.2	18 3.2 18 3.2	474 18 3.2	472 18 3.2	470 18 3.2 471 18 3.2	18 3.2	467 18 3.2 468 18 3.2	465 18 3.2 466 18 3.2	463 18 3.2 464 18 3.2	18 3.2
526 18 3.2 801 10 529 18 3.2 805 3 530 18 3.2 806 6 532 18 3.2 806 6 532 18 3.2 806 7	525 18 3.2 800 3 526 18 3.2 800 3 527 18 3.2 800 3	522 18 3.2 797 7 523 18 3.2 798 3 524 18 3.2 799 3	18 3.2 796 9 18 3.2 797 3	18 3.2 795 8 18 3.2 796 3	18 3.2 791 10 18 3.2 794 8	18 3.2 788 8 18 3.2 788 10	18 3.2 785 3 18 3.2 786 7	18 3.2 782 6 18 3.2 784 7	18 3.2 781 7	18 3.2 768 9	18 3.2 764 7	503 18 3.2 761 10 504 18 3.2 762 10	18 3.2 758 9 18 3.2 761 3	18 3.2 756 3 18 3.2 758 1	497 18 3.2 755 6 498 18 3.2 755 7	495 18 3.2 754 6 496 18 3.2 755 3	18 3.2 752 10 18 3.2 752 11	18 3.2 /52 6	18 3.2 751 10	488 18 3.2 747 10	18 3.2 747 6	18 3.2 745 5	18 3.2 745 3 18 3.2 745 3	480 18 3.2 744 10 481 18 3.2 745 2	479 18 3.2 744 3	477 18 3.2 743 10	18 3.2 739 6 18 3.2 740 3	4/3 18 3.2 /38 / 4/74 18 3.2 738 10	472 18 3.2 735 6	470 18 3.2 731 6 471 18 3.2 731 7	18 3.2 730 7	467 18 3.2 729 9 468 18 3.2 730 1	465 18 3.2 727 3 466 18 3.2 729 6	463 18 3.2 725 5 464 18 3.2 725 10	18 3.2 725 2
526 18 3.2 801 70 529 18 3.2 805 3 531 18 3.2 806 6 532 18 3.2 806 7	525 18 3.2 800 3 526 18 3.2 800 3 527 18 3.2 800 3	522 18 3.2 797 7 523 18 3.2 798 3 524 18 3.2 799 3	18 3.2 796 9 18 3.2 797 3	18 3.2 795 8 18 3.2 796 3	18 3.2 791 10 18 3.2 794 8	18 3.2 788 8 18 3.2 788 10	18 3.2 785 3 18 3.2 786 7	18 3.2 782 6 18 3.2 784 7	18 3.2 781 7	18 3.2 768 9	18 3.2 764 7	503 18 3.2 761 10 504 18 3.2 762 10	18 3.2 758 9 18 3.2 761 3	18 3.2 756 3 18 3.2 758 1	497 18 3.2 755 6 498 18 3.2 755 7	495 18 3.2 754 6 496 18 3.2 755 3	18 3.2 752 10 18 3.2 752 11	18 3.2 /52 6	18 3.2 751 10	488 18 3.2 747 10	18 3.2 747 6	18 3.2 745 5	18 3.2 745 3 18 3.2 745 3	480 18 3.2 744 10 481 18 3.2 745 2	479 18 3.2 744 3	477 18 3.2 743 10	18 3.2 739 6 18 3.2 740 3	4/3 18 3.2 /38 / 4/74 18 3.2 738 10	472 18 3.2 735 6	470 18 3.2 731 6 471 18 3.2 731 7	18 3.2 730 7	467 18 3.2 729 9 468 18 3.2 730 1	465 18 3.2 727 3 466 18 3.2 729 6	463 18 3.2 725 5 464 18 3.2 725 10	18 3.2 725 2
526 18 3.2 801 10 529 18 3.2 805 3 530 18 3.2 806 6 531 18 3.2 806 6 531 3.2 806 7	525 18 3.2 800 3 526 18 3.2 800 3 527 18 3.2 800 3	522 18 3.2 797 7 523 18 3.2 798 3 524 18 3.2 799 3	18 3.2 796 9 18 3.2 797 3	18 3.2 795 8 18 3.2 796 3	18 3.2 791 10 18 3.2 794 8	18 3.2 788 8 18 3.2 788 10	18 3.2 785 3 18 3.2 786 7	18 3.2 782 6 18 3.2 784 7	18 3.2 781 7	18 3.2 768 9	18 3.2 764 7	503 18 3.2 761 10 504 18 3.2 762 10	18 3.2 758 9 18 3.2 761 3	18 3.2 756 3 18 3.2 758 1	497 18 3.2 755 6 498 18 3.2 755 7	495 18 3.2 754 6 496 18 3.2 755 3	18 3.2 752 10 18 3.2 752 11	18 3.2 /52 6	18 3.2 751 10	488 18 3.2 747 10	18 3.2 747 6	18 3.2 745 5	18 3.2 745 3 18 3.2 745 3	480 18 3.2 744 10 481 18 3.2 745 2	479 18 3.2 744 3	477 18 3.2 743 10	18 3.2 739 6 18 3.2 740 3	4/3 18 3.2 /38 / 4/74 18 3.2 738 10	472 18 3.2 735 6	470 18 3.2 731 6 471 18 3.2 731 7	18 3.2 730 7	467 18 3.2 729 9 468 18 3.2 730 1	465 18 3.2 727 3 466 18 3.2 729 6	463 18 3.2 725 5 464 18 3.2 725 10	18 3.2 725 2
529 18 3. 530 18 3. 531 18 3. 532 18 3.	525 18 3.2 800 3 526 18 3.2 800 3 527 18 3.2 800 3	522 18 3.2 797 7 523 18 3.2 798 3 524 18 3.2 799 3	18 3.2 796 9 18 3.2 797 3	18 3.2 795 8 18 3.2 796 3	18 3.2 791 10 18 3.2 794 8	18 3.2 788 8 18 3.2 788 10	18 3.2 785 3 18 3.2 786 7	18 3.2 782 6 18 3.2 784 7	18 3.2 781 7	18 3.2 768 9	18 3.2 764 7	503 18 3.2 761 10 504 18 3.2 762 10	18 3.2 758 9 18 3.2 761 3	18 3.2 756 3 18 3.2 758 1	497 18 3.2 755 6 498 18 3.2 755 7	495 18 3.2 754 6 496 18 3.2 755 3	18 3.2 752 10 18 3.2 752 11	18 3.2 /52 6	18 3.2 751 10	488 18 3.2 747 10	18 3.2 747 6	18 3.2 745 5	18 3.2 745 3 18 3.2 745 3	480 18 3.2 744 10 481 18 3.2 745 2	479 18 3.2 744 3	477 18 3.2 743 10	18 3.2 739 6 18 3.2 740 3	4/3 18 3.2 /38 / 4/74 18 3.2 738 10	472 18 3.2 735 6	470 18 3.2 731 6 471 18 3.2 731 7	18 3.2 730 7	467 18 3.2 729 9 468 18 3.2 730 1	465 18 3.2 727 3 466 18 3.2 729 6	463 18 3.2 725 5 464 18 3.2 725 10	18 3.2 725 2
5.26 1.6 3.2 801 CG812372 529 1.8 3.2 803 10 CG812372 530 1.8 3.2 805 3 BJ776077 531 1.8 3.2 806 6 CD492925 532 1.8 3.2 806 7 CO008699	525 18 3.2 800 3 BJ740322 526 18 3.2 800 3 BJ818186 527 18 3.2 800 3 BJ818168	522 18 3.2 797 CK636274 523 18 3.2 798 3 BJ793602 524 18 3.2 799 3 BJ792945	18 3.2 796 9 CC562052 18 3.2 797 3 BJ815300	18 3.2 795 8 CX435796 18 3.2 796 3 BJ798577	18 3.2 791 10 AY413237 18 3.2 794 8 CX340122	18 3.2 788 8 CX459162	18 3.2 785 3 BJ780244 18 3.2 786 7 CO429772	18 3.2 782 6 CF822598 18 3.2 784 7 CO918205	18 3.2 781 7 CR280432	18 3.2 768 9 AZZ38066	18 3.2 764 7 CN283197	503 18 3.2 761 10 CE655969 504 18 3.2 762 10 CW493596	18 3.2 758 9 BH484031 18 3.2 761 3 BJ784496	18 3.2 756 3 BM160936 18 3.2 758 1 AV405557	497 18 3.2 755 6 CF/13276 498 18 3.2 755 7 CV203057	495 18 3.2 754 6 CF825942 496 18 3.2 755 3 BJ128370	18 3.2 752 10 CW556236 18 3.2 752 11 CNS07PNQ	18 3.2 752 6 CB653019 18 3.2 752 9 BH184801	18 3.2 751 10 CW606523	48 18 3.2 747 / CN033942 488 18 3.2 747 10 CW831094	18 3.2 747 6 CD351031	18 3.2 745 5 BU216935	18 3.2 745 3 BJ794380 18 3 2 745 3 BJR10700	480 18 3.2 744 10 BX230222 481 18 3.2 745 2 BE541824	479 18 3.2 744 3 BJ791431	477 18 3.2 743 10 CW578350	18 3.2 739 6 CB457471 18 3.2 740 3 BO042226	4/3 18 3.2 /38 / CU428906 474 18 3.2 738 10 CL766270	472 18 3.2 735 6 CD642113	470 18 3.2 731 6 CD872303 471 18 3.2 731 7 CK776799	18 3.2 730 7 CO024064	467 18 3.2 729 9 BZ446527 468 18 3.2 730 1 ATOAIR34	465 18 3.2 727 3 BI543885 466 18 3.2 729 6 CD824516	463 18 3.2 725 5 BU939588 464 18 3.2 725 10 AG604537	18 3.2 725 2 BG212803
5.26 1.6 3.2 801 CG812372 529 1.8 3.2 803 10 CG812372 530 1.8 3.2 805 3 BJ776077 531 1.8 3.2 806 6 CD492925 532 1.8 3.2 806 7 CO008699	525 18 3.2 800 3 BJ740322 526 18 3.2 800 3 BJ818186 527 18 3.2 800 3 BJ818168	522 18 3.2 797 CK636274 523 18 3.2 798 3 BJ793602 524 18 3.2 799 3 BJ792945	18 3.2 796 9 CC562052 18 3.2 797 3 BJ815300	18 3.2 795 8 CX435796 18 3.2 796 3 BJ798577	18 3.2 791 10 AY413237 18 3.2 794 8 CX340122	18 3.2 788 8 CX459162	18 3.2 785 3 BJ780244 18 3.2 786 7 CO429772	18 3.2 782 6 CF822598 18 3.2 784 7 CO918205	18 3.2 781 7 CR280432	18 3.2 768 9 AZZ38066	18 3.2 764 7 CN283197	503 18 3.2 761 10 CE655969 504 18 3.2 762 10 CW493596	18 3.2 758 9 BH484031 18 3.2 761 3 BJ784496	18 3.2 756 3 BM160936 18 3.2 758 1 AV405557	497 18 3.2 755 6 CF/13276 498 18 3.2 755 7 CV203057	495 18 3.2 754 6 CF825942 496 18 3.2 755 3 BJ128370	18 3.2 752 10 CW556236 18 3.2 752 11 CNS07PNQ	18 3.2 752 6 CB653019 18 3.2 752 9 BH184801	18 3.2 751 10 CW606523	48 18 3.2 747 / CN033942 488 18 3.2 747 10 CW831094	18 3.2 747 6 CD351031	18 3.2 745 5 BU216935	18 3.2 745 3 BJ794380 18 3 2 745 3 BJR10700	480 18 3.2 744 10 BX230222 481 18 3.2 745 2 BE541824	479 18 3.2 744 3 BJ791431	477 18 3.2 743 10 CW578350	18 3.2 739 6 CB457471 18 3.2 740 3 BO042226	4/3 18 3.2 /38 / CU428906 474 18 3.2 738 10 CL766270	472 18 3.2 735 6 CD642113	470 18 3.2 731 6 CD872303 471 18 3.2 731 7 CK776799	18 3.2 730 7 CO024064	467 18 3.2 729 9 BZ446527 468 18 3.2 730 1 ATOAIR34	465 18 3.2 727 3 BI543885 466 18 3.2 729 6 CD824516	463 18 3.2 725 5 BU939588 464 18 3.2 725 10 AG604537	18 3.2 725 2 BG212803
5.20 18 3.2 803 10 CG812372 5.30 18 3.2 805 3 BJ776077 5.31 18 3.2 806 6 CD492925 5.32 18 3.2 806 7 CO008099	525 18 3.2 800 3 BJ740322 526 18 3.2 800 3 BJ818186 527 18 3.2 800 3 BJ818168	522 18 3.2 797 CK636274 523 18 3.2 798 3 BJ793602 524 18 3.2 799 3 BJ792945	18 3.2 796 9 CC562052 18 3.2 797 3 BJ815300	18 3.2 795 8 CX435796 18 3.2 796 3 BJ798577	18 3.2 791 10 AY413237 18 3.2 794 8 CX340122	18 3.2 788 8 CX459162	18 3.2 785 3 BJ780244 18 3.2 786 7 CO429772	18 3.2 782 6 CF822598 18 3.2 784 7 CO918205	18 3.2 781 7 CR280432	18 3.2 768 9 AZZ38066	18 3.2 764 7 CN283197	503 18 3.2 761 10 CE655969 504 18 3.2 762 10 CW493596	18 3.2 758 9 BH484031 18 3.2 761 3 BJ784496	18 3.2 756 3 BM160936 18 3.2 758 1 AV405557	497 18 3.2 755 6 CF/13276 498 18 3.2 755 7 CV203057	495 18 3.2 754 6 CF825942 496 18 3.2 755 3 BJ128370	18 3.2 752 10 CW556236 18 3.2 752 11 CNS07PNQ	18 3.2 752 6 CB653019 18 3.2 752 9 BH184801	18 3.2 751 10 CW606523	48 18 3.2 747 / CN033942 488 18 3.2 747 10 CW831094	18 3.2 747 6 CD351031	18 3.2 745 5 BU216935	18 3.2 745 3 BJ794380 18 3 2 745 3 BJR10700	480 18 3.2 744 10 BX230222 481 18 3.2 745 2 BE541824	479 18 3.2 744 3 BJ791431	477 18 3.2 743 10 CW578350	18 3.2 739 6 CB457471 18 3.2 740 3 BO042226	4/3 18 3.2 /38 / CU428906 474 18 3.2 738 10 CL766270	472 18 3.2 735 6 CD642113	470 18 3.2 731 6 CD872303 471 18 3.2 731 7 CK776799	18 3.2 730 7 CO024064	467 18 3.2 729 9 BZ446527 468 18 3.2 730 1 ATOAIR34	465 18 3.2 727 3 BI543885 466 18 3.2 729 6 CD824516	463 18 3.2 725 5 BU939588 464 18 3.2 725 10 AG604537	18 3.2 725 2 BG212803
526 18 3.2 801 10 529 18 3.2 805 3 530 18 3.2 806 6 531 18 3.2 806 6 531 3.2 806 7	525 18 3.2 800 3 BJ740322 526 18 3.2 800 3 BJ818186 527 18 3.2 800 3 BJ818168	522 18 3.2 797 CK636274 523 18 3.2 798 3 BJ793602 524 18 3.2 799 3 BJ792945	18 3.2 796 9 CC562052 18 3.2 797 3 BJ815300	18 3.2 795 8 CX435796 18 3.2 796 3 BJ798577	18 3.2 791 10 AY413237 18 3.2 794 8 CX340122	18 3.2 788 8 CX459162	18 3.2 785 3 BJ780244 18 3.2 786 7 CO429772	18 3.2 782 6 CF822598 18 3.2 784 7 CO918205	18 3.2 781 7 CR280432	18 3.2 768 9 AZZ38066	18 3.2 764 7 CN283197	503 18 3.2 761 10 CE655969 504 18 3.2 762 10 CW493596	18 3.2 758 9 BH484031 18 3.2 761 3 BJ784496	18 3.2 756 3 BM160936 18 3.2 758 1 AV405557	497 18 3.2 755 6 CF/13276 498 18 3.2 755 7 CV203057	495 18 3.2 754 6 CF825942 496 18 3.2 755 3 BJ128370	18 3.2 752 10 CW556236 18 3.2 752 11 CNS07PNQ	18 3.2 752 6 CB653019 18 3.2 752 9 BH184801	18 3.2 751 10 CW606523	48 18 3.2 747 / CN033942 488 18 3.2 747 10 CW831094	18 3.2 747 6 CD351031	18 3.2 745 5 BU216935	18 3.2 745 3 BJ794380 18 3 2 745 3 BJR10700	480 18 3.2 744 10 BX230222 481 18 3.2 745 2 BE541824	479 18 3.2 744 3 BJ791431	477 18 3.2 743 10 CW578350	18 3.2 739 6 CB457471 18 3.2 740 3 BO042226	4/3 18 3.2 /38 / CU428906 474 18 3.2 738 10 CL766270	472 18 3.2 735 6 CD642113	470 18 3.2 731 6 CD872303 471 18 3.2 731 7 CK776799	18 3.2 730 7 CO024064	467 18 3.2 729 9 BZ446527 468 18 3.2 730 1 ATOAIR34	465 18 3.2 727 3 BI543885 466 18 3.2 729 6 CD824516	463 18 3.2 725 5 BU939588 464 18 3.2 725 10 AG604537	18 3.2 725 2 BG212803

	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	C C C S S S S S S S S S S S S S S S S S	574 575 576 577 578 C 579 580	1777700000		C C 5443 S 5445 S 5446 S 551 S 552 S 553 S 553	
18 18 18 18 18 18 18 18 18 18 18 18 18 1	188 188 188 188 188 188 188 188 188 188	18 18 18 18 18	18 18 18 18 18	18 18 18 18 18	18 8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	100 0 100 100 100 100 100 100 100 100 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
						817 817 817 820 822 822 823 824 825	
7 COO 6 CF8 8 CX3 8 EX3 5 BU9 5 BQ7 5 CF8 11 CX 111 CX 111 CX 111 CX						10 DU08 10 DU08 11 CG84 10 CG85 11 CW71 11 CW71 11 CW71 11 CW71 11 CW71 11 CW71 11 DU07 11 DU07 17 CC0113	
CO019709 CCF826442 CC3328614 BU912729 BQ717625 CF826289 CCS514147 CCS514148 CCRS04H8B CA987658	20891 786635 010050 010050	16839 27723 27723 218116 702636 702636 23400 23400 23400 23400	39107 24038 355145 39179 3972982 374589 354881	55910 712847 712847 269733 504PWO 05535 072014 08YHT 22379	35 0 94 93 1 4 8 33 5 2 9 24 2 8 9 24 2 8 9 25 6 9 9 26 6 9 9 27 6 9 27 6 9 9 27 6 9 2	CF823740 DU082163 DU086099 CG845436 CB568329 B17713147 CW713147 CX968690 CX381997 C0013974 DU070491 CV770532 CO0013975	14169 20850 20296 33355 52902 24715 24715
COOL COOL COOL CX32 BU91 BQ71 CF82 CZ55 AL25 CA98 CF82	CF82 CC09 CW7 BU15 CW0	BJ74 CF82 CZ2 CW7 CF82 CA988	CC58 CF82 AG8 BX06 CW9 CL4 CW9	BE25 CW7 CG2 AL3 CF70 CR57 EX03 CO01	BJ78 CA49 CX41 CO03 CF82 BX1 BU31 BU31 CF82 BE61 BJ78	DU0 DU0 DU0 CG8 CG8 B177 CW7 CW36 CX38 CO01 DU0 CV77	CC71 CF82 CF82 CX63 CX63 DR85 CO02 DR42 CF82
9709 ES 9709 ES 6442 ES 8614 JG 8729 AG 7625 AG 6289 ES 14147 G 90612 T 7658 AG 7896 ES	3385 CS 86635 S 2920 AG 10050 Z 88089 3	6839 BJ 7723 ES 7723 ES 18116 A 02636 A 02636 A 3400 ES 5313 AG 7698 ES	9107 CH 4038 ES 55145 O 3553 Si 3553 Si 72982 A 74589 S 54881 T	5910 60 12847 A 69733 Q 01833 T 5535 CC 2014 CR 4125 Si 54125 Si 5462 ES	5094 BJ 3148 AG 9339 JG 9339 ES 4289 ES 90492 D 3402 60 3402 60 3404 60	CR823740 ES DU082163 3 DU086099 3 DU086099 3 CG845436 Q CB558329 AG EH771392 60 CW713147 A CX96809 UG CX3881997 UG CX3881997 ES CW7770532 PG CW7770532 PG CW013975 ES	4169 OG 0850 ESS 2296 ESS 3355 CE 2902 JG 4715 ESS 7108 ESS
EST915802 EST915802 EST703824 JGI XZT67 AGENCOURT AGENCOURT EST703671 TGMW2-86C2 2 Tetraodon AGENCOURT EST705278	T698273 T698273 U-K34.1 P Ba00 P Ba00	746839 T705105 TAA-aaf TAA-aak T700782 T7000787	17701420 T7701420 TYZA SE MG1e re MG1e re LIAA-aas AIL 222 CB44.3	110988(IAA-aaaGWJD111)GWJD111 GWJD111 etraodc etraodc 772014 1572014 17785844	785094 ENCOURT I XZG13 T811913 T701671 T701671 anio re 3540512 T703077	277423 Tom 37743 Tom 0G4AA54TH AGENCOURT 603059413 JGI_CAA53 JGI_CAA53 JGI_CAA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 JGI_CA53 EST802309 138260 To FGAS06492 EST802310	OGUBS29TH EST698232 EST699678 EST699601. CABG8 EST803099 nax16906. EST704490
5 N	ä ⊢ ¯N	¯Ñω	ੰਬ) ਪਾੰਜ	~ · 5 < \o ·	Ĥ -	ិ 0 ំ ំ ដើគ្បី	
C 675 C 671 C 673 C 675 C 675 C 676 C 6778		C C C C C C C C C C C C C C C C C C C		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		c 615 616 618 619 620 621 623 623 623 623 623	c 607 c 608 c 609 610 c 611 c 612 c 613
						188 188 188 188 188 188	
	ւ	ս ա ա ա ա ա ա ա					
			2 120 2 126 2 131 2 232 2 232 2 323 10			22 959 2 959 2 959 2 963 2 971 2 977 2 977 2 978 2 983 2 983 2 987 2 988	
7 7 8 8 15 5 9 2 10 3 5	20100701	220	1144410	. 0 0 0 0 0 1 0 1 0	10 5 9 4 3 11	100	47776571
EQUIRON EN	BE2083 CV3153 AZ7750 BB2316 AI7920 BI0035	D25877 D25877 DN2517 BJ9043 BZ80849 BZ3729 BZ3729 AL7566 BE4856	AJ9282: CNS00: AK0096: CL960: CR9259: CR9259: AK0494: AA8450: RT1423:	CC1922 CK1628 DN7307 CL5166 CC28666 CC2483 CC2126 CC2486	CNS03J BM5544 CNS08J CC7807 BX8398 CC2069 CZ926 CZ969 BQ2120 CZ968	CW639189 CV210692 AI525673 CNS03Y75 CP822880 CNS03EMD CNS02GTC CNS02GTC CNS02GTC CV203056 CV203056 CV203056 CV480004 DU016564	0 AY407285 CV210691 BY709303 CF825901 CO007844 CV203058 CR852984 CNS08EME
944 7368 7368 7368 743	1404755 1401973 140197	776 774 776 776 776	37 1CL 44 647 58	05 15 284 02 61 73 773	KPG 49 5U 10 17 17 269 269 110	189 73 80 80 80 80 80 80 80 80 80 80 80 80 80	2285 91 03 03 64 44 88 88
	8 > 8 > C 8 0	ים פששש שנ	מ מ ממש	00000 400		o⊄ o⊌ oo	8000080
C20294 C2029291 CW29291 G40927 G40927 CH31064 C131064 N359107 21635 N340689	E20835 V31535 V31507 Z77507 E23164 I792028 I003544	N25177 1 N25177 1 N25177 1 N25177 1 N25177 1 N25177 1 N25177 1 N2517 1	M92823 AL0602 K00964 CL9606 CL9598 R92598 R92598 K04945 R04945 R04945	C19220 K16284 N73071 C25162 C25660 C24836 C24836 C21267 C21267 C24661	AL2484 IM55444 IX01425 IC78071 IX83981 IC20698 IC29698 ICZ9691 ICZ96891 ICZ96891	CW6391 152567 1152567 AL2659 X00836 X00836 AL1967 AL1967 P823666 V203056 CV203056 CU48000	AY4072 V21069 V70930 F82590 C000784 V20305 R85298 X00837
7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	3 E S C E E	HUMG 5 AC 4 BJ 7 PU 5 ie 77 A	7 AJ 06 DJ 4 Mu 47 Og 9 POI 9 AV		61 Te 9 AGI 4 Sir 0 ZMI 0 ZMI 7 BXI 5 CHI 5 AGI 10 1e	54 SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	BS M B ES' B ES' CRI Sil
9n1c 104 -HSP 041H 03S4 1B36 7000	1000 1000 1000 1000 1000 1000 1000 100	S05 S05 PHL PHL PHL PHL PHL PHL PHL PHL PHL PHL	92E	61161161	1911 1911 1935 1986 1986 1986 1986 1986 1986 1986 1986	TROSECTIONS TO SECULATION OF THE PROPERTY OF T	187 1705 1705 1706 1706 1706 1706 1706 1706 1706 1706
mic.pko 104 773 1 104 773 1 	11-HT092 11-HT092 10007L01 10007L01 1231641 102f04.y 13-HN012	S05524 AB-aab9 904374 FHL28TD 74a04.b rabidops 2687 BA	928237 rosophil s muscu sIFCC004 rgo pyg s muscu sZb01.s	261-95F ASO1544 354-E01 AIL 916 261-146 261-88J 261-75G 261-176	etraodon ENCOURT TIGLE re TIGLE re TIGLE 18 TIGLE 180 TI	CW639189 OA ABa017 CV210692 EST870402 AI525673 PT1.3 04 AL265946 Tetraodon CF822800 EST700262 BX008369 Single re AL196761 Tetraodon AL051269 Drosophil CF823666 EST701048 CV203056 EST962766 CV2966936 166028 To CL480004 SAIL 316 DU016564 239062 To	us muscu T870401 709303 T703283 T796179 T862768 B52984 ngle re

777777777777777777777777777777777777777	0 0 0 7116 0 7118 0 7120 0 7121 0 7128 0 7128 1733 1733	C CC C
111111111111111111111111111111111111111	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	111111111111111111111111111111111111111
		233 233 233 234 234 224 234 224 234 224 234 224 234 224 234 23
0	0 0	1 A1685520 10 CG628093 5 8099990 1 AV337574 1 AV339300 815066735 2 BE768836 3 B1505672 3 B1505695 6 BX659447 1 AA84420 1 AV292974 1 AA8478233 2 BB372847 6 CB685419 6 CB685419 6 CC6685419 6 CC6685419 6 CC6685419 6 CC9685419 1 AV292974 1 AA84486 3 B1507144 9 B284486 3 B150714
BH814788 SALK 0669 AA355942 EST64466 CG651458 OST412582 DR430241 nax27g07. ALB37856 ALB37856 BB045335 BB045335 BB045335 BB045335 CN930150 000322AFB CN930150 000322AFB CN930145 000322AFB AA939145 0963h08.8 AJ280659 4A3A-AAS-BY114035 BY114013 BY114013 BY114751 BY114751 BY114751 BY114751 BY114751 BY114751 GCF04655 EMMBBC017 ENGS1986-CG704655 EMMBBC017 BY334870 BY334870	BB41393 BB41383 BF771008 IL5-IT002 AA937287 omL6e10.8 BW854725 BW854725 BB554398 BB554398 AA143357 zo37b01.x AI950549 wx52a10.x AA254296 va09f08.r BQ4274552 ACENCOURT CC082781 CSU-K33x. CG551573 OST158877 BY113436 BY113436 BB248085 BB248085 CA718030 wdk5c.pk0 AJ670617 AJ670617 BF047913 dc85a12.y BM094133 sah25912. BU344774 603522748 CC728724 Ligr-g88-	AI685520 tu36c09.x CG628093 OST338939 BU099909 3524 1 24 AV337574 AV337574 AV337574 AV337574 AV337574 AV337574 AV309300 AV309300 BI5066735 BB170032A CL908455 OA ABBAG00 BE768836 PM1-FT002 BI50656 BB170032A BB378847 BB378847 CE685419 OSJNEf15M CF450645 ES7686990 AV207686 AV207686 BI507144 BB170025A CE021074 tigr-gss-BZ844846 CH240_215 BJ397492 BJ397492 AW358117 42030 WAR AG222858 Lotus cor BB224185 BB224185 BI484031 RB67050.4 BI484031 RB67050.4 BH5902 YW24909.11 BB158134 BB158134 CZ555233 KHA130 BB BZ762865 SALK 1092 CZ778272 OC BB158134 BB158134 BB158134 BB158134 BB158134 CZ5758273 KHA130 BB BZ762865 SALK 1093 CZ778272 OC BB193
	C C 799 88888888888888888888888888888888888	C C C C C C C C C C C C C C C C C C C
000 000 000 000 000 000 000 000 000 00	300400000000000000000000000000000000000	8888889777777777776666666666555555555555
111111111111111111111111111111111111111		
		3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
		9 BH145763 5 BY114218 5 BY114496 5 BY114496 5 BY114496 5 BY114496 5 BY129616 7 CK099179 1 BY1014609 1 BY1014609 1 BY10112 7 CK761183 1 CK199627 7 CK761183 1 CK199627 6 BY114276 8 R43601 9 CC199627 5 BY114276 5 BY114276 5 BY114276 5 BY114276 5 BY114276 5 BY114276 5 BY19174 6 BY19174 8 CX1109174 8 CX110913 1 AV230250 1 AW592580 2 BF44873 3 BF44873 5 R0450923 9 CC068229 10 AG251591 7 CV200923 10 AG251591 7 CV200923 10 AG251591 7 CV200923
AL789148 AL7 AA597486 297 CG147902 PU W52055 ZC91C0 BY292421 BY2 AA772918 ae7: BY498321 BY4 BY498321 BY4 ACE674218 ti. ACE674218 ti. ACE674218 T. BE707606 BY0 BE1312 CIT-H. CG147906 PU. R61718 Y904h. D27951 CELKO R43256 Y910e. BY277344 BY2 BY531897 BP5: BP663033 BP66	CYSSASSO USD. CYSSASSO USD. CYSSASSO USD. EXO41760 BYO. CO728255 HS. AC226456 HS. AC226456 HS. AC226456 HS. AC226456 HS. AC226456 HS. AC21632 BYA. AC21532 AV2. AC21532 AV2. BY427302 BY4. AC2167210 UMC. CO728210 UMC. CO728210 UMC. BY528900 352. BY5286727 RPC. BY5286727 RPC. BY586727 BYO. CO080661 BYO. BY131660 BY11.	BH145763 TDGFA16TH BY114218 BY114396 BY114499 BY114396 BY114499 BY114396 BY114699 BY114699 BY329616 BY3299616 BP942313 BP942313 BY990617 BY790617 CK099179 A055P21.5 AJ6819026 AJ689026 AJ689026 AJ689026 AJ689026 BY114276 BY15112 BY15512 CC199627 XH754 Bay BY114276 BY17542 Bay BY114276 BY17543 BY1941875 BY794215 BY794215 BY794215 BY794215 BY794215 BY794215 BY794215 BY794215 BY316875 BY3433 BY39433 AV530250 AV530250 AW530250 AV530250 AW593250 AV53025 AW54873 SWCV3MCAM BY109336 BY109136 D42931 LOCUS GOY CN584146 USDA-FP_1
89148 57 Lam JFM22TB 904.r1 904.r1 90321 90321 907.s 907.	1760 2023 B 18901 10004 H 10004 H 100004 H 10004 H 10004 H 10004 H 10004 H 10004 H 10004 H 10004 H 100	14218 14396 14699 14699 129616

C 891 C 892 C 893 C 894 C 895 C 896 B97	888 889 890	C 884 C 885 886	880 881 882	677 C 878 879		C 873		868 868		C 862 863 864			0 88 55 50 50 44	852 853	85 9 0 7 8 1 7 8	C 848	C 845 846	C 843 844	841 842	c 839 840		836	C 834	832		C 828
17 17 17 17	17 17 17		17 17 17	17 17 17	17	17 17	17	17	17	17 17	17 17	17	17 17	17 17	17	17 17	17 17	17 17	17 17	17 17	17 17	17	17	17	17	17 17
4 4 2 2 2 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2																										
6 CA901706 1 AV788457 9 AQ520051 10 CW661288 9 AZ720410 10 CL451177 1 AII50584 1 AI885503												CF417824 CV462105														
CA901706 PCSC19629 AV788457 AV788457 AQ520051 HS 5194 A CW661288 OG BBBG01 AZ720410 RPCT-24-9 CL451177 ZMMBBb047 AI150584 Qf36g03.x AI885503 wm24h01.x	AV231220 AV23 BY261947 BY26 AW987980 Uf95: BP644437 BP64 AQ334449 HS 5	CB503339 ssail DN396426 LIB3 AJ657303 AJ65 AU231220 AU23	BQ577507 3524 CA112299 SCEP AQ677983 HS 5	CK049821 4637 AA208798 mu65 AA494356 ne27	CZ643826 OM BQ448789 CAES	AW178484 CM1- AW300566 xs67 AZ604044 1M04	AA260348 va91 AV697978 AV69	AZ/24654 KPCI BH129484 G-5f AL963762 AL96	AA123262 mn34. AW305068 xv88	AA462297 vg67 CB768648 AMGN CB812619 AMGN	CE317850 tig AI285975 qh97 BY095515 BY09	CF417824 USDA CV462105 Lr J	CN764215 IDOA AI299437 qn16 CN973285 2078	AI061187 an32 CN763339 IDOA	CO000690 UMC- DN131975 1148	AI250696 qx09 BG956389 IL3-	CR494343 mth AI002456 og82	CA726395 wet1 AI302385 qn50	AQ116392 CIT9 AW338809 ha58	BY372650 BY37 CX228349 MBM0	BP654924 BP65 AA275253 vc02	BY047140 BY04 CB778967 AMGN	BI771428 6030	CB702594 AMGN		b B
9625 9627 94 A 94 A 94 O 91 O 91 O 91 O 91 O 91 O 91 O 91 O 91	947 947 04. Y 95 A	3	1 38 B104 31 B	rsic 07.r 12.s	Ba019	T011 08.x 3N08	01.r 978	24-1 4.f 762	05. r	03.r UC:s	-988- 10.x 515	20F_1	A9BB 03.x	03.x A6DB	end 8 M	07.x T067	-143P 12.8	.pk0 03.x	85K-	650 005	924 12.r	140 UC:C	9466	NNUC:S	99d03.8	12.x
0 9 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	C 960 C 962 963	C 956 C 957 C 958			C 949	C 945	C 943 C 944		c 939	C 935	932 933 934	930 931	C 927	925 926	922 923	c 920 921	919 919	c 916 917	91.	c 912 913		908 909	906 907	C 905	903	
																			U1 #2-1		-0					
77777777	5555	17	17	17 17	777	17	17 17	17	17	17 17	17 17 17	17	17	17	17	17 17	17 17							17	17	17
200000000				 	333	1 7 7 1 W W	7 3.			1 T T	777	3 3 3 3 3 3 3 3 3 3	, , , , , , , , , , , , , , , , , , ,	2 2 2	 	7 3.	7 3.	17 3.	17 3.	17 3.	17 3. 17 3.	17 17 3.	17 17 3.	7		
3.0 458 7 3.0 458 7 3.0 458 7 3.0 458 7 3.0 459 7 3.0 460 7 3.0 460	7 3.0 456 7 3.0 456 7 3.0 456 7 3.0 457	7 3.0 454	7 3.0 452 7 3.0 452 7 3.0 453	7 3.0 452 7 3.0 452 7 3.0 452	7 3.0 451	.7 3.0 450 .7 3.0 451	7 3.0 448 7 3.0 448	7 3.0 447 7 3.0 447 7 3.0 448	7 3.0 446	7 3.0 443	7 3.0 439 7 3.0 439 7 3.0 443	7 3.0 438	7 3.0 437 7 3.0 437 7 3.0 437	7 3.0 436 7 3.0 437	7 3.0 435 7 3.0 436	7 3.0 432 7 3.0 432	7 3.0 432 7 3.0 432	17 3.0 431 17 3.0 431	17 3.0 431 17 3.0 431	17 3.0 430 17 3.0 431	17 3.0 429 17 3.0 429	17 3.0 429 17 3.0 429	17 3.0 429 17 3.0 429	7 3.0 428	7 3.0 427	7 3.0 424 7 3.0 425 7 3.0 425
17 3.0 457 8 N29998 17 3.0 458 5 BQ485752 17 3.0 458 5 BQ995577 17 3.0 458 5 BU997586 17 3.0 459 8 CV993034 17 3.0 460 1 AA185671 17 3.0 460 7 CN910896 17 3.0 461 1 AA18346	7 3.0 455 9 BH76 7 3.0 455 3 BJ47 7 3.0 456 5 BY46 7 3.0 456 5 BY46 7 3.0 457 1 AI20	7 3.0 453 10 CW 7 3.0 454 1 AI65 7 3.0 454 6 CF77 7 3.0 454 9 AO1	7 3.0 452 10 CZ; 7 3.0 452 10 CZ; 7 3.0 453 2 BE80	.7 3.0 452 2 BG46 .7 3.0 452 5 BY03 .7 3.0 452 7 CN7	7 3.0 451 11 CPJ	.7 3.0 450 7 CO2: .7 3.0 451 1 AA20	7 3.0 448 7 CV46 7 3.0 448 9 BZ5	7 3.0 447 3 BP6 7 3.0 447 9 AQ46 7 3.0 448 1 AA06	7 3.0 446 2 BG88	7 3.0 443 3 BM49 7 3.0 444 6 CD18	7 3.0 439 5 BY26 7 3.0 439 9 AZ86 7 3.0 443 2 BF29	7 3.0 438 6 CB917 3.0 438 7 CN7	7 3.0 437 1 AJ6: 7 3.0 437 6 CF0:	7 3.0 436 7 CK70 7 3.0 437 1 AI2	7 3.0 435 3 BP63 7 3.0 436 1 AJ63	7 3.0 432 7 CO87 7 3.0 432 9 CE01	7 3.0 432 2 BEO 7 3.0 432 5 BY20	17 3.0 431 2 BE61 17 3.0 431 6 CD7	17 3.0 431 1 AL1: 17 3.0 431 1 AWI:	17 3.0 430 6 CA7'	17 3.0 429 8 DTO 17 3.0 429 9 AO4	17 3.0 429 1 AA40 17 3.0 429 3 BP6	17 3.0 429 1 AIO 17 3.0 429 1 AU2:	7 3.0 428 6 CF0	7 3.0 427 6 CF0	7 3.0 424 5 BUO 7 3.0 425 1 AIS
7 3.0 457 8 N29 7 3.0 458 5 BQ4 7 3.0 458 5 BU9 7 3.0 458 5 BU9 7 3.0 459 8 CV9 7 3.0 460 1 AA11 7 3.0 461 1 AA11	7 3.0 454 9 AQ1/3232 AQ1/37 3.0 455 9 BH766535 BH77/7 3.0 456 3 BJ423821 BJ42/7 3.0 456 5 BY463678 BY46/7 3.0 456 5 BY463678 BY46/7 3.0 457 1 AI200532 AI20	7 3.0 453 10 CW048668 CW 7 3.0 454 1 A1657121 A16 7 3.0 454 6 CP798665 CP7 7 3.0 454 9 A0175232 A01	7 3.0 452 10 CZZ16629 CZZ 7 3.0 452 10 CZL89369 CZL 7 3.0 453 2 BE802493 BE8	7 3.0 452 2 BG467361 BG41 7 3.0 452 5 BY031635 BY03 7 3.0 452 7 CN771062 CN7	7 3.0 451 1 CPA562863 AJI 7 3.0 452 1 AW232041 AW2:	7 3.0 450 7 CO222154 CO2: 7 3.0 451 1 AA267770 AA26 7 3.0 451 2 EVERTIONS EVERT	7 3.0 448 7 CV462154 CV46 7 3.0 448 9 BZ500226 BZ5	7 3.0 447 3 BP619535 BP6. 7 3.0 447 9 AQ460701 AQ41 7 3.0 448 1 AA068227 AA0	7 3.0 446 2 BG882443 BG88 7 3.0 447 1 AA702143 AA71	7 3.0 443 3 BM494855 BM4: 7 3.0 444 6 CD188189 CD1. 7 3.0 445 1 ATSO270 ATSO	7 3.0 439 5 BY269140 BY2 7 3.0 439 9 AZ888958 AZ8 7 3.0 443 2 BY293371 BY2:	7 3.0 438 6 CB937292 CB99 7 3.0 438 7 CN774734 CN7	7 3.0 437 1 AJ659667 AJ6, 7 3.0 437 6 CF009787 CF0	7 3.0 436 7 CK704271 CK70 7 3.0 436 7 CK704271 CK70 7 3.0 437 1 AI218140 AI2	7 3.0 435 3 BP626059 BP6 7 3.0 436 1 AP655520 AP6	7 3.0 432 7 CO870021 CO8 7 3.0 432 9 CE034201 CE0	7 3.0 432 2 BE042680 BE0 7 3.0 432 5 BY261655 BY2	17 3.0 431 2 BE652752 BE6 17 3.0 431 6 CD703241 CD7	17 3.0 431 1 ALL33995 ALL1 17 3.0 431 1 AW134660 AW1	17 3.0 430 6 CA772388 CA7 17 3.0 431 1 AIO16037 AIO	17 3.0 429 8 DT047831 DT0 17 3.0 429 9 AO477739 AO4	17 3.0 429 1 AA461757 AA4 17 3.0 429 3 BP625734 BP6	17 3.0 429 1 AIO74337 AIO 17 3.0 429 1 AU227677 AU2:	7 3.0 428 6 CF009359 CF0	7 3.0 427 6 CP096211 CP0	7 3.0 424 5 BUOB7109 BUO 7 3.0 425 1 A1572070 A15 7 3.0 425 1 A1572070 A15

```
ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                            RESULT 1
AQ237761/c
                                            FEATURES
                                                                                                                                                                                                                                                                    REFERENCE
                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          \alpha \alpha \alpha \alpha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 იი
                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                          AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         976
977
978
979
980
981
982
983
                                  source
                                                                                                                                                                                                             Adams,M.D., Rounsley,S.D., Zhao,S., Berry,K., Granger,D., Suh,E., Wibit Use of human BAC End Sequences for Unpublished (1998)
Other_GSSs: RPCII1-6402.TJ
                                                  http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html Seq_primer: T7 Class: BAC ends.
                                                                                                                                                The Institute for Genomic Research 9712 Medical Center Dr., Rockville, Tel: 301 838 0200
Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                       AQ237761 346 bp DNA linear GSS 21-APR-
RPCII1-6402.TK RPCI-11 Homo sapiens genomic clone RPCI-11-6402,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       library availability, please contact Pieter de Jong (pieter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from Research Genetics (info@resgen.com). BAC end search page:
                                                                                                                                                                                          Contact: Mark Adams
Department of Eukaryotic Genomics
                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                  SSD
                                                                                                                                                                                                                                                                                                                                           ĀQ237761
ĀQ237761.1 GI:3670052
                                                                                                                                                                                                                                                                                                                                                              genomic survey sequence.
                                                                                                                          Email: mdadams@tigr.org
                                                                                                                                                                                                                                                                                                             Homo sapiens
                                                                                                                                                                                                                                                                             Hominidae; Homo.
                                                                                                                                                                                                                                                                 (bases 1 to 346)
                                                                                                                                                                                                                                                                                                                      sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="GDB:7524529"
                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              44444444444663
4444446664
4444666644446666
47710666677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CV042296
BF731967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BZ319086
AW831257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CB400547
BJ368156
CF011165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AQ859136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AM017545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CN563918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BH739422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AI377858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI488145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BF555515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CF109927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CA640836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AW102664
                                                                                                                                                                                                                                  S.D., Zhao,S., Bass,S., Linher,K., Golden,K.,
Suh,E., Wible,C., de Jong,P. and Venter,J.C.
Sequences for Sequence-Ready Map Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AI916866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CE805867
                                                                                                                                                                                                                                                                                                                                                                                                                                       ALIGNMENTS
                                                                                                                                                                     MD 20850,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CF10927 Shurran
BZ319086 hx53all.g
BZ319086 hx53all.g
""a31257 sm14b04.y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF555515 UI-R-A1-d
BI488145 9C75c08.y
CF011477 QBU8904.p
AQ200911 RPC111-61
AI377858 te63907.x
BH739422 9f14c05.b
AI125439 qd89a07.x
AW410418 fh06a06.y
CN563918 taf94c10.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CN563918 taf94c10.
CV042296 tai54c01.
BF731967 3160-87 h
BB301773 bb78c05.x
AQ859136 nbeb0011M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CE805867 tigr-gss-
BY256761 BY256761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CF011165 QBJ6f06.p
CA640836 wrein.pk0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CE805867
                                                                                                                                                                                                                                                                                                                                                                                  GSS 21-APR-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AM017545
3 EST177094
0 00962 lea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       xd69d08.x
OSTF178G2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                wb46e04.x
UI-R-DKO-
```

S

173 AAATTATCTTCCAAAATAAAA 193

Query Match Best Local Similarity

Matches

21;

Conservative

100.0%;]

Score 21; DB Pred. No. 17 0; Mismatches

DB 1;

Length 436;

<u>.</u>.

Indels

0,

Gaps

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AW069787/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 173 AAATTATCTTCCAAAATAAAA 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AW069787
436 bp mRNA linear EST 20-JUN-200:
cr50e08.x1 Human bone marrow stromal cells Homo sapiens cDNA clone
HBMSC cr50e08 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 (bases 1 to 436)
Jia,L., Young,M.F., Powell,J., Yang,L., Ho,N.C., Hotchkiss, Robey,P.G. and Francomano,C.A.
Gene expression profile of human bone marrow stromal cells: high-throughput expressed sequence tag sequencing analysis Genomics 79 (1), 7-17 (2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA Sequencing and analyses by National Institutes of Health Intramural Sequencing Center (NISC).
Plate: 50 row: e column: 08
Seq primer: -21M13 forward primer (ABI).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AW069787.1 GI:6024785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: libin@helix.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 301-402-4877
Fax: 301-496-7157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          National Human Genome Research Institute 10/10C101, 9000 Rockville Pike, Bethesda,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Libin Jia
Medical Genetics Branch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11827452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATTATCTTCCAAAATAAAA 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.8%;
ilarity 100.0%;
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/clons="HHMSC_cr50e08"
/sex="mixed"
                   /tissue_type="bone marrow stroma"
/dev_stage="mixed"
/lab_host="XLI-Blue MRF'/SOLR"
/clone_lib="Human bone marrow stromal cells"
/note="Vector: pBluescript; Site_1: EcoKI; Site_2: XhoI;
/note="Vector: pBluescript; Site_1: 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /cell_type="Lymphocytes"
/clone_lib="RPCI-11"
/clone_tib="RPCI-15"
/note="Vector: pBAC63.6; Site_1: EcoRI; Site_2: EcoRI;
RPCII1 Human Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /db_xref="taxon:9606"
/clone="RPCI-11-6402"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 21;
; Pred. No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 346;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MD 20892-1267,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hotchkiss, R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    EST 20-JUN-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
CE052269/c
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                        BW864686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                          RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
                                                    COMMENT
                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                               173
                                                                                                                                                                                                                                                                                                                                                                                           264 AAATTATCTTCCAAAATAAA 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                 BW864686 Amphioxus Branchiostoma floridae unpublished cDNA library, neurula whole animal Branchiostoma floridae cDNA clone bbne073g09
 Center For Genetic Resource Information National Institute of Genetics 1111 Yata, Mishima, Shizuoka 411-8540,
                                                 Yu,J., Holland,L.Z., Shin-i,T., K
Expressed genes in Branchiostoma
Unpublished (2005)
Contact: Tadasu Shin-i
                                                                                                                                                                    Branchiostoma floridae (Florida lancelet)
Branchiostoma floridae
                                                                                                                                                                                                                                     5', mRNA sequence.
BW864686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 301-838-0200
Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Kirkness EF
The Institute for Genomic Research
Department of Eukaryotic Genomics,
Rockville, MD 20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 (bases 1 to 557)

Kirkness, E.F., Bafna, V., Halpern, A.L., Levy, S., Remington, K., Rusch, D.B., Delcher, A.L., Pop, M., Wang, W., Fraser, C.M. and Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genomic survey sequence. CE052269
                                                                                                                                                                                                                     BW864686.1 GI:66479363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: ekirknes
Class: shotgun.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The dog genome: survey sequencing and comparative analysis Science 301 (5641), 1898-1903 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CE052269 557
tigr-gss-dog-17000358213862 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Canis familiaris (dog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CE052269.1 GI:35095672
                                                                                                                                      Branchiostoma.
                                                                                                                                                    Eukaryota; Metazoa; Chordata; Cephalochordata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14512627
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Canis
                                                                                                                                                                                                                                                                                                                                                                                                                           АВАТТАТСТТССАВАВТАВАВ 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATTATCTTCCAAAATAAAA
                                                                                                                    bases 1 to 559)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ekirknes@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone lib="Dog Library"
/note="Site 1: BstXI; Libraries were prepared
peripheral blood"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Canis familiaris"
/mol_type="genomic DNA"
/strain="Standard Poodle"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 db_xref="taxon:9615"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%;
100.0%;
Shizuoka 411-8540, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                             °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 21;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7 bp DNA linear GSS 24-SEP-20 Dog Library Canis familiaris genomic,
                                                                                   Kohara,Y.,
a floridae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIGR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9712 Medical Center Drive,
                                                                                                  Satou, Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                      Branchiostomidae;
                                                                                                      and Satoh, N
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GSS 24-SEP-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 from
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>,</u>
```

```
REFERENCE
AUTHORS
밁
                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 5
DR421506/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                            Query Match
Best Local S
Matches 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                            Local Similarity
469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    505 GAAGTAGCTGAAGCTTTCACT 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    268 GAAGTAGCTGAAGCTTTCACT 288
                              46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21;
                                                            21;
                                                                                                                                                                                                                                                                                                                                                                                                          Southeast Missouri State University Southeast Missouri State University Cape Girardeau,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Coprinopsis cinerea (Coprinus cinereus)
Coprinopsis cinerea
Eukaryota; Fungi; Basidiomycota; Hymenomycetes; Homobasidiomycetes;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carlson, M.D., Barr, C., Murphy, B., Lilly, W.W. and Pukkila, P.J.
Expressed sequence tags from Copri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DR421506 582 bp mRNA CCHS7E08 Coprinus cinereus heat-shocked
                                                                                                                                                                                                                                                                                                                                                                                                      Tel: 5736512361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cinerea) cDNAs, spring 2005
Unpublished (2005)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Gathman AC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Agaricales; Psathyrellaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DR421506.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cinerea cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 81-559-81-6856
Fax: 81-559-81-6855
                                                                                                                                                                                                                                                                                                                                                                                         Fax: 573 651 2382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 (bases 1 to 582)
GAGCAACCGATTAAGCGCCGT
                              GAGCAACCGATTAAGCGCCGT 66
                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                tshini@genes.nig.ac.jp
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                        agathman@semo.edu
                                                                                                                                                      /clome_lib="Coprinus cinereus heat-shocked mycelia cDNAs" /note="Vector: pBluescript II SK+; Site 1: EcoRI; Site 2: XhoI; Mycella grown for three days at 37 degrees on minimal medium, then transferred to pre-warmed minimal media and incubated at 42 degrees for one hour before
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "mol_type="mRNA"
/db_xtef="taxon:7739"
/clone="bbne073909"
/tissue_type="whole animal"
/dev_stage="neurula"
/clone lib="Amphioxus Branchiostoma floridae unpublished cDNA library, neurula whole animal"
                                                                                                                                                                                                                                       /dev_stage="vegetative monokaryotic mycelium"
/lab_host="E. coli XL10-Gold"
                                                                                                                                                                                                                                                                       /strain="Okayama7#130"
/db_xref="taxon:5346"
                                                                                                                                                                                                                                                                                                        organism="Coprinopsis
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  organism="Branchiostoma floridae"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:68323522
                                                                          3.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٥,
                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 21;
; Pred. No.
                                                            Score 21; DB;
Pred. No. 18;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Coprinus cinereus (Coprinopsis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Coprinopsis.
                                                                                                                                                                                                                                                                                                                       cinerea"
                                                                            18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 5;
17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wilke, S.K.,
                                                                                           8;
                                                                                                                                                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                         63701,
                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
| mycelia cD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                           Length 582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gathman, A.C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ar EST 29-JUN-2005
cDNAs Coprinopsis
                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                              Gaps
                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 6
AQ237789/c
                                                                                                                                                                                                            RESULT 7
CE361611/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DEFINITION
                                                                                SOURCE
ORGANISM
                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                  KEYWORDS
                                                                                                                                                ACCESSION
                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE
                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                173 AAATTATCTTCCAAAATAAAA 193
                                                                                                                                                                                                                                                                              224 AAATTATCTTCCAAAATAAAA 204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: mdadams@tigr.org

Clones are derived from the human BAC library RPCI-11. For BAC

Clones are derived from the human BAC library RPCI-11. For BAC

library availability, please contact Pieter de Jong

(pieter@dejong.med.buffalo.edu). Clones may be purchased from

BACPAC Resources (http://bacpac.med.buffalo.edu/ordering) or from

Research Genetics (info@resgen.com). BAC end search page:

http://www.tigr.org/tdb/humgen/bac_end_search/bac_end_search.html

Seq primer: T7

Class: BAC ends.
                                                                                                                                                                            CE361611
tigr-gss-dog-17000361532982 [
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The Institute for Genomic Research 9712 Medical Center Dr., Rockville, Tel: 301 838 0200 Fax: 301 838 0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Department of Eukaryotic Genomics
The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished (1998)
Other_GSSs: RPCI11-6406.TJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Adams,M.D., Rounsley,S.D., Zhao,S., Bass,S., Linher,K., Golden Berry,K., Granger,D., Suh,E., Wible,C., de Jong,P. and Venter, Use of human BAC End Sequences for Sequence-Ready Map Building
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AQ237789
RPCI11-6406.TK RPCI-11 Homo
 Kirkness, E.F.,
                                                                              Canis familiaris
                                                                                             Canis familiaris (dog)
                                                                                                              CE361611.1 GI:36575419
GSS.
                                                                                                                                              genomic survey
CE361611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AQ237789.1 GI:3670080
GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             genomic survey sequence.
AQ237789
                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Carnivora; Fissipedia; Canida
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Mark Adams
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
                                 Canis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 609)
                (bases 1 to
                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       /cell_type="Lymphocytes"
/clone_lib="RPCI-11"
/note="Vector: pBACe3.6; Site_1:
RPCI11 Human Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         db_xref="GDB:7524533"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . .609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        clone="RPCI-11-6406"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                         3.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _type="genomic DNA"
   Bafna, V.,
                                                                                                                                                             sequence
                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                         Score 21;
Pred. No.
Halpern, A.L., Levy, S., Remington, K.,
                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            609 bp
                                                                                                                                                                              Dog
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                             đq
                                                                                                                                                                              Library Canis familiaris
                                                                                                                                                                                                                                                                                                                                                                        DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                               DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA linear GSS 21-APR-1999 genomic clone RPCI-11-6406,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ₹
                                                                                                                                                                                                                                                                                                                                          ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20850,
                                                                                                                                                                                                                                                                                                                                                                       Length 609
                                                                                                                                                                                                                                                                                                                                                                                                                                        EcoRI; Site_2:
                                                                                                                                                                                                linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                                                                                                                                               GSS 27-SEP-2003
                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             , Golden, K.,
Venter, J.C.
                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                            genomic,
                                                                                                                                                                                                                                                                                                                                                                                                                                          ECORI;
                                                Canidae;
                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 8
CR825238/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                  FEATURES
                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                          TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                        TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               source
 source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bos taurus (cow)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tel: 301-838-0200
Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            14512627
                                                                                                                                                                                                                                                                                                                           Direct Submission
                                                                                                                                                                                                                                                                                                                                          Genoscope
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CR825238.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CR825238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Class: shotgun
                                                                                                                                                                                                                                                                                                                                                                                                                                        Pecora; Bovidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
```

```
The Institute for Genomic Research Department of Eukaryotic Genomics, Rockville, MD 20850, USA
                                                         Email: eggen@jouy.inra.fr
Clones are derived from the INRA bovine BAC library
Clones are derived from the INRA bovine BAC library
(http://locus.jouy.inra.fr/fpc/cattle_bac map.htm). For BAC library
availability, please contact Andre Eggen (eggen@jouy.inra.fr). This
work was undertaken as part of the International Bovine BAC
Mapping Consortium (IBBMC) by INRA (Jouy-en-Josas) and Genoscope
(Evry) Plate: 1005 row: H column: 12
                                                                                                                                                                                                                                                                                                                               - Web : www.genoscope.cns.fr)
Contact: Andre Eggen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DNA sequence, genomic CR825238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The dog genome: survey sequencing and comparative analysis Science 301 (5641), 1898-1903 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Rusch,D.B., Delcher,A.L., Pop,M., Wang,W., Fraser,C.M. and
Venter,J.C.
                                                                                                                                                                                                                                                                                                                                                                             Submitted (20-SEP-2004) Genoscope
BP 191 91006 EVRY cedex - FRANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eggen, A., Schibler, L. and Roy, A. Bovine BAC End Sequences from the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GROAAA56BC03FM2 INRA BAC Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Contact: Kirkness EF
                  Seq primer: M13 Forward Class: BAC ends.
                                                                                                                                                                                                                       Tel: 33 1 34 65 24 24 Fax: 33 1 34 65 24 78
                                                                                                                                                                                                                                                                                                              Department of Animal Genetics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
                                                                                                                                                                                                                                                                   78350 Jouy-en-Josas,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAATTATCTTCCAAAATAAAA 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAATTATCTTCCAAAATAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (bases 1 to 779)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (bases 1 to 779)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ekirknes@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /note="Site 1: BstXI; Libraries
peripheral blood"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Canis familiaris"
/mol_type="genomic DNA"
/strain="Standard Poodle"
/db_xref="taxon:9615"
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               clone_lib="Dog Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GI:52761326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                     France
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 21;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gurvey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      779 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
18;
                                                                                                                                                                                                                                                                                                                                                                               (E-mail :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INRA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TIGR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10;
                                                                                                                                                                                                                                                                                                                                                                                                  Centre National de Sequencage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          were prepared
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9712 Medical Center Drive,
                                                                                                                                                                                                                                                                                                                                                                             segref@genoscope.cns
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               clone INRAb_1005H12,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BAC library
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       637;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GSS 27-SEP-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 9
DN590945/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
  Query Match 3.8%; Score 21; Best Local Similarity 100.0%; Pred. No. Matches 21; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          306 TTAGAAGATCATATGGATGTT 286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                229 TTAGAAGATCATATGGATGTT 249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 asterids; lamiids; Solanales; Solanaceae; Solanum.

1 (bases 1 to 902)

Flinn,B., Rothwell,C., Sardana,R., Griffiths,R., Lague,M., De
Koeyer,D., Audy,P., Goyer,C., Li,X.-Q., Wang-Pruski,G. and Regan,S.
Generation of ESTs from late blight-challenged potato tubers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DN590945
DN590945.1 GI:61241550
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The Canadian Potato Genome Project - BioAtlantech 921 College Hill Rd, Fredericton, ON, E3B 6Z9, CA Email: bflinn@bioatlantech.nb.ca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished (2005)
Contact: Barry Flinn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; lamiids; Solanales; Solanaceae; Solanum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   92028.1 Late Blight-Challenged Tubers Solanum tuberosum CDNA clone 92028 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Solanum tuberosum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Solanum tuberosum (potato)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DN590945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 primer:
                                                                                                     /tissue_type="Tubers"
/lab_host="XL10-Gold"
/clone_lib="Late Blight-Challenged Tubers"
/clone_lib="Late Blight-Challenged Tubers"
/note="Vector: pBluescript II SK(+) XR; Site_1: EcoRI;
Site_2: XhoI; supplier: Pathogen-challenge series. Tubers
from pathogen-free Solanum tuberosum var. Shepody, clone
1756, were inoculated with 5 ul of Phytophthora infestans
(A2-mating type), through 2 puncture wounds 3 cm apart.
The tubers were incubated 1 minute to allow inoculum
absorption. The infection area was outlined for future
collection reference. Surface slices were sampled from the
tubers at 1 day, 5 days, 7 days, 11 days and 14 days
post-infection. All samples were pooled and used for RNA
isolation and library construction. A normalized library
was constructed following a modified protocol of Bonaldo
et al. (1996. Genome Research 6: 791-806)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Bos taurus"
/mol_rype="genomic DNA"
/strain="breed: Holstein"
/db_xref="taxon:9913"
/clone="INRAb_1005H12"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cell_type="fibroblast"
/clone_lib="INRA_bovine_BAC"
/clone="Vector: pBeloBACI; Site_1: HindIII; Holstein bull;
INRA_Bovine_BAC_library (Male) produced by Andre Eggen
Genoscope_sequence_ID : GROADAS5BC03FM2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              db_xref="taxon:4113"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="mRNA"
/cultivar="Shepody"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Solanum tuberosum"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /sex="Male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 21; DB 11; Length 779; Pred. No. 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ġ
                      DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       E3B 6Z9, CANADA
  0
                                          Length 902;
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST 15-MAR-2005
ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>,,</u>
Gaps
٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                            RESULT 11
AG191545/c
                                                                                                                                                    밁
                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 10
BF475913/c
                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                               Spoot
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCUS
                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                              468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                       20;
sequence
```

FEATURES

COMMENT

TITLE

밁 S

KEYWORDS VERSION ORIGIN

ORIGIN

genomic

```
Query Match
Best Local Similarity
                                                                                                                                                                         164 AGCGGTAGCAGAGGCTCTTG 145
AG191545 220 bp DNA Pan troglodytes DNA, clone: RP43-067122.T7,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BF475913 208 bp mRNA linear EST 05-DEC-2000 naa14e07.x1 NCI_CGAP_Pr28 Homo sapiens cDNA clone IMAGE:3254869 3' similar to TR:Q15355 Q15355 SKELETAL MUSCLE ABUNDANT PROTEIN.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            High quality sequence stop: 1.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CDNA Library Preparation: M. Bento Soares, Ph.D. CDNA Library Arrayed by: Greg Lennon, Ph.D. DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL, send email to:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hominidae, Homo.
1 (bases 1 to 208)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Seq primer: -40UP from Gibco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    info@image.llnl.gov
Trace considered overall poor quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Emmert-Buck, M.D., Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tissue Procurement: Michael J. Brownstein, M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BF475913.1 GI:11546740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       mRNA sequence.
                                                                                                                                                                                                                          AGCGGTAGCAGAGGCTCTTG 487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAGAGAGAAATACAAAAGT 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAAGAGAGAAATACAAAAGT 567
                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                   /clone_lib="NCI_CGAP_Pr28"

/note="Organ: prostate; Vector: pT7T3D-Pac (Pharmacia)
with a modified polylinker; Plasmid DNA from the
normalized library NCI_CGAP_Pr22 was prepared, and ss
circles were made in vitro. Following HAP purification,
this DNA was used as tracer in a subbractive hybridization
reaction. The driver was PCR-amplified cDNAs from a pool
of 5,000 clones made from the same library (cloneIDs
985608-986759, 1101192-1101959, and 1217928-1220615).
Subtraction by Bento Soares and M. Fatima Bonaldo. "
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone="IMAGE:3254869"
                                                                                                                                                                                                                                                                                                           100.0%;
                                                                                                                                                                                                                                                                                                           3.6%; Score 20;
L00.0%; Pred. No.
                                                                                                                                                                                                                                                                                 <u>.</u>
                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                           DB 2;
                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                     Length 208
                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ph.D.,
                                  GSS 06-MAR-2004
                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Michael
                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ×
                                                                                                                                                                                                                                                                              0
```

```
TITLE
JOURNAL
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
VERSION
KEYWORDS
                                                             JOURNAL COMMENT
                                                                                                                                          REFERENCE
AUTHORS
                                                                                                                                                                                                                                           SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                 CX630648/c
                                                                                                                                                                                                                                                                                  VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                 DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 12
                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       392 ATAATTCTAGAATTTCAGAA 411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     33
                                                                        Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnollophyta; Liliopsida; Poales; Poaceae; Pooideae; Triticeae; Hordeum.

1 (bases 1 to 326)
Biemell,S., Jansen,C., Schaefer,P., Hueckelhoven,R., Felk,A., Schaefer,W., Scholz,U., Sonnewald,U. and Kogel,K.H.
Barley ESTs from different tissues challenged with fungal pathogen; Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                           CX630648 326 bp mRNA linear EST 14-JAN-2005
GNW001F05r GNW Hordeum vulgare cDNA clone GNW001F05 5-PRIME, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (07-JAN-2002) Hong-Seog Park, Korea Research Institute of Bioscience and Biotechnology (KRIBB), Genome Research Center (GRC); 52, Oun-dong, Yusong-gu, Daejeon 305-333, Korea (E-mail:redecone@mail.kribb.re.kr, URL:http://phs.grc.kribb.re.kr/, Tel:82-42-866-7181, Fax:82-42-860-4409)
Clones are derived from the chimpanzee BAC library RP-43 This BAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Park,H., Kim,Y., Kim,S., Han,Y., Woo,T., Park,K., Eun,C.J., Hoon,S.T., Chu,M., Kim,H., Joo,S., Kim,C., Song,W. and Yoo,H. BAC end sequences of Library RP-43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AG191545
AG191545.1 GI:45223721
GSS
                                                                                                                                                                                                                                                                                                                          sequence.
CX630648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             end was generated during the R&D process and may have higher chance of clone tracking errors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Park, H., Kim, Y., Kim, S., Han, Y., Woo, T., Park, K., Eun, C.J., Hoon, S.T., Chu, M., Kim, H., Joo, S., Kim, C., Song, W. and Yoo, H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pan troglodytes (chimpanzee)
Pan troglodytes
                      Biology
                                                                                                                                                                                                                                         Hordeum vulgare
                                                                                                                                                                                                                                                              Hordeum vulgare
                                                                                                                                                                                                                                                                                  EST
                                                                                                                                                                                                                                                                                                   CX630648.1 GI:57829435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                   Molecular Developmental Physiology, Department Molecular Cell
                                                           Contact: Sophia Biemelt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Hominidae; Pan
Institute of Plant Genetics and Crop Plant Research (IPK)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LIBRARY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIMERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (bases 1 to 220)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vector : pBACe3.6
R.Site 1 : EcoRI
R.Site 2 : EcoRI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sequencing: T7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /cell_type="lymphocytes"
/clone_lib="RP-43 Chimpanzee Male BAC Library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /db_xref="taxon:9598"
/clone="RP43-067122.T7"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Pan troglodytes"
/mol_type="genomic DNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.6%; Score 20; DB 10; Length 220; 100.0%; Pred. No. 56;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                               fungal pathogens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             °.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 13
CX630668/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                       FEATURES
                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                             REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Snoo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                        AUTHORS
```

```
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                     JOURNAL.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               137 TTATTTGTGAATGTATGGCA 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence.
CX630668
CX630668.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             95
                                                                                                                                                                                                                                                                                                                              Hordeum vulgare
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
Pooideae; Triticeae; Hordeum.

1 (bases 1 to 352)
Bismelt,S., Jansen,C., Schaefer,P., Hueckelhoven,R., Felk,A.,
Schaefer,W., Scholz,U., Sonnewald,U. and Kogel,K.H.
Schaefer,W., Scholz,U., Sonnewald,U. and Kogel,K.H.
Barley ESTs from different tissues challenged with fungal pathogens
Unpublished (2004)
Contact: Sophia Biemelt
Molecular Developmental Physiology, Department Molecular Cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Corrensstr. 3, 06466 Gatersleben, Germany Tel: +49 (0)39482-5476 Fax: +49 (0)39482-5515
                                                                                                                                                                                                  Institute of Plant Genetics and Crop Plant Research (IPK) Corrensstr. 3, 06466 Gatersleben, Germany Tel: +49 (0)39482-5515 Fax: +49 (0)39482-5515
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CX630668 352 bp mRNA linear GNW001G04r GNW Hordeum vulgare cDNA clone GNW001G04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: biemelt@ipk-gatersleben.de
Insert Length: 326 Std Error: 0.00
Plate: 1 row: F column: 5
                                                                                                          Email: biemelt@ipk-gatersleben.de
Insert Length: 352 Std Error: 0.00
Plate: 1 row: G column: 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hordeum vulgare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Seq primer: Ml3rev.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTATTTGTGAATGTATGGCA 76
                                                                                  primer: Ml3rev.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /tissue_type="roots"
//tissue_type="roots"
/lab host="E. coli BM25.8"
/clome_lib="GNW"
/clome_lib="GNW"
/clome_lib="GNW"
/note="Vector: pTriplEx2; Site_1: Sfi IA; Site_2: Sfi IB;
/note="Vector: pTriplEx2; Site_1 amixture of SERAMIS and
OIL DRI soil at 20 degr. C, 16h light and 50-60% rel.
humidity for 7 days, Roots were harvested 6, 24, 48, 72,
and 96 hpi (hours post inoculation) with Fusarium culmorum
KF 350. PolyA-RNA was isolated from water treated roots
and used to create a CDNA-library by means of the SMART
CDNA library construction Kit (CLONTECH). CDNA Fragments
were inserted into the vector Lambda TripleEx Sfi I.
Subsequently, plasmids were obtained by in vivo excision
according to manufacturers instruction. (GABI-Agrotech
Project)"
/organism="Hordeum vulgare"
                             Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="GABI:958984"
/db_xref="taxon:4513"
/clone="GNW001F05"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /mol_type="mRNA"
/cultivar="Nickel"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Hordeum vulgare"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GI:57829455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.6%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 8;
. 57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EST 14-JAN-2005
5-PRIME, mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
```

```
RESULT 14
AQ832728/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 20
                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   20;
                                                                                                                                                                                                            Tel: (206) 616-3618
Fax: (206) 616-3887
Email: jwallace@u.washington.edu
Clones may be purchased from Research Genetics (info@resgen.com).
BAC end Web Server: http://www.htsc.washington.edu
Plate: 3238 row: C column: 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hominidae; Homo.

1 (bases 1 to 398)

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T.,
Mahairas,G.G., Wallace,J.C., Young,J., Zhao,S., Adams,M.D. (Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D. (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AQ832728 398 bp DNA linear USS 2/-AU
HS 3238 A1 B11 MR CIT Approved Human Genomic Sperm Library D F
sapiens genomic clone Plate=3238 Col=21 Row=C, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sequence.
AQ832728
AQ832728.1 GI:5798790
                                                                                                                                                                        Seq primer: M13 Reverse
Class: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                       High Throughput Sequencing Center University of Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                  401 Queen Anne Avenue North, Seattle,
                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Mahairas GG, Wallace JC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence-tagged connectors: A sequence approach to mapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTATTTGTGAATGTATGGCA 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTATTTGTGAATGTATGGCA 66
                                                                                                                                                 quality sequence stop: 398.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="Vector: pTriplEx2; Site_1: Sfi IA; Site_2: Sfi IB; roots, Seedlings were grown in a mixture of SERAMIS and OIL DRI soil at 20 degr. C, 16h light and 50-60% rel. humidity for 7 days, Roots were harvested 6, 24, 48, 72, and 96 hpi (hours post inoculation) with Fusarium culmorum KF 350. PolyA-RNA was isolated from water treated roots and used to create a cDNA-library by means of the SMART CDNA library construction Kit (CLONTECH). CDNA Fragments were inserted into the vector Lambda TripleEx Sfi I. Subsequently, plasmids were obtained by in vivo excision according to manufacturers instruction. (GABI-Agrotech Project)"
/organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="plate=3238 Col=2
                                                                                                                        Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /tissue_type="roots"
/lab_host="E. coli BM25.8"
/clone_lib="GNW"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /db_xref="GABI:959004"
/db_xref="taxon:4513"
/clone="GNW001G04"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/cultivar="Nickel"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
     Col=21 Row=C"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96 (17), 9739-9744 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             58;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Hood L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                  WA 98109, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GSS 27-AUG-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

á

ORIGIN

멍

Snoor

COMMENT

JOURNAL TITLE REFERENCE

AUTHORS

KEYWORDS VERSION ACCESSION

ORGANISM

FEATURES

S

270 AGTAGCTGAAGCTTTCACTG 289

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
BF843865
                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Spoons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      JOURNAL
PUBMED
    Matches
                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 225 TGTTTTAGAAGATCATATGG 244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        234 TGTTTTAGAAGATCATATGG 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20;
                                                                                                                                                                                                                                                                                                                                                                                Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=WR1&t2=WR1-HT1184-
181200-001-f12&t3=2000-12-18&t4=1)
Seq primer: puc 18 forward
High quality sequence start: 8
High quality sequence stop: 471.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Hominidae; Homo.
1 (bases 1 to 471)
1 (bases 1 to 471)
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Dias Neto, E., Garcia Correa, R., Zago, M.A., Bordin, S., Costa, F.F., Rollman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deOliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             471 bp mR1 MR1-HT11184-181200-001-f12 HT1184 Homo BF843865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Tel: +55-11-2704922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Brazil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BF843865.1 GI:12198863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        . Natl. Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                      /Clone lib="HTI194"
//clone lib="HTI194"
//note="Organ: head_neck; Vector: puc18; Site_1: SmaI;
//note="Organ: head_neck; Vector: puc18; Site_1: SmaI;
//site_2: SmaI; A mini-library was made by cloning products
derived from ORESTES PCR (U.S. Letters Patent application
No. 196,716 - Ludwig Institute for Cancer Research)
profiles into the pUC 18 vector. Reverse transcription of
tissue mRNA and cDNA amplification were performed under
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone_lib="CIT Approved Human Genomic Sperm Library D"
/note="Organ: sperm; Vector: pBeloBAC11; BAC Clones in
B-Coli DH10B"
                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                       1. .471
                                                                                                      low stringency conditions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.6%;
  0
                      Score 20; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
  Mismatches
                         DB 2;
59;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58
BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens cDNA,
0
                                           Length 471;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EST 13-JAN-2001
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

밁

282

AGTAGCTGAAGCTTTCACTG

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 16
CN846247/c
                                                                                                              SOURCE
ORGANISM
                                                                                                                                                                                     DEFINITION
ACCESSION
                                                                                                                                                                                                                                        RESULT 17
BE665726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                    KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                    VERSION
                                                                                                                                                                                                                         Snoor
                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                 145
                                                                                                                                                                                                                                                                                                                                  171 TCAAATTATCTTCCAAAATA 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PG07010F11 Ginseng cDNA library from MeJA linear EST 02-JUN-2004 ginseng cDNA clone PG07010F11 5', mKNA sequence.

CN846247.1 GI:47963538

EST.
                                                                                                                                                BE665726.1
BE665726.1
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Analysis of transcripts in methyl jasmonate-treated ginseng hairy roots to identify genes involved in the biosynthesis of ginsensides and other secondary metabolites
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       52 Oun-Dong, Yusong-Gu,
Tel: 82 42 863 2051
Fax: 82 42 863 2049
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota, Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledoms; core eudicotyledoms; asterids; campanulids; Apiales; Araliaceae; Panax.

1 (bases 1 to 480)
Smith, T.P.L., Grosse, W.M., Freking, B.A., Roberts, A.J., Casas, E., Wray, J.E., White, J., Cho, J., Fahrenkrug, S.C.
                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
                                                                                                              Bos taurus (cow)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Seq primer: T3
High quality sequence stop:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Liu,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Choi, D.W., Jung, J.D., Ha, Y.I., Park, H.W., In, D.S., Chung, H.J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Panax ginseng
                                   Pecora; Bovidae; Bovinae; Bos.
1 (bases 1 to 546)
                                                                                                                                                                                                      154863 MARC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BACKWARD: T7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Email: dwchoi@eugentech.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eugentech / KRIBB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Dong-Woog Choi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Panax ginseng
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FORWARD: T3
                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ginseng hairy root were
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /tissue_type="MeJA treated hairy root"
/clone_lib="Ginseng cDNA library from MeJA treated hairy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Panax ginseng"
/mol_type="mRNA"
/db_xref="taxon:4054"
/clone="PG07010F11"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            note="Vector: lambda ZAP XR; cDNAs from MeJA treated/
nseng hairy root were cloned into lambda ZAP XR vec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Location/Qualifiers
                                                                                                                                                                    GI:10026317
                                                                                                                                                                                                    4BOV Bos taurus cDNA 5', mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                     3.6%;
                                                                                                                                                                                                                                                                                                                                                                                    <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                     Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Daejen 305-333, Korea
                                                                                                                                                                                                                       546
                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                         ģ
                                                                                                                                                                                                                                                                                                                                                                                                       59
59
                                                                                                                                                                                                                     mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                      7;
                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                      Length 480
                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                         EST
                                                                                                                                                                                                                                                                                                                                                                                   0;
                      Stone, R.T.
                                                                                                                                                                                                                       25-APR-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              XR vector"
                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 18
BM289207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pocas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
PUBMED
                                                                                                                                                                              JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match 3.6
Best Local Similarity 100.
Matches 20; Conservative
                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480 AGCAGAGGCTCTTGGGATTG 499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 474
                                                                                                                                                                                           1 (bases 1 to 556)
Smith, T.P.L., Grosse, W.M., Freking, B.A., Roberts, A.J., Stone, R.T.
Cassa, E., Wray, J.E., White, J., Cho, J., Fahrenkrug, S.C.,
Bennett, G.L., Heaton, M.P., Laegreid, W.W., Rohrer, G.A.,
Chitko-McKown, C.G., Pertea, G., Holt, I., Karamycheva, S., Liang, F.,
Quackenbush, J. and Keele, J.W.
Sequence evaluation of four pooled-tissue normalized bovine cDNA
libraries and construction of a gene index for cattle
Genome Res. 11 (4), 626-630 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CONTACT: Smith TPL
USDA, ARS, US Meat Animal
PO Box 166, Clay Center, N
Tel: 402 762 4366
Fax: 402 762 4390
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bennett,G.L., Heaton,M.P., Laegreid,W.W., Rohrer,G.A., Chitko-McKown,C.G., Pertea,G., Holt,I., Karamycheva,S., Liang,F., Quackenbush,J. and Keele,J.W.

Sequence evaluation of four pooled-tissue normalized bovine cDNA libraries and construction of a gene index for cattle
Tel: 402 762 4366
Fax: 402 762 4390
Email: smith@email.marc.usda.gov
Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called and alt trimmed with phred
v0.980904.e. Vector identified by cross_match with the -minscore 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BACKWARD: GTTTTCCCAGTCACGACG
Plate: 68 row: G column: 22
Seq primer: ATTTAGGTGACACTATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: smith@email.marc.usda.gov
Single pass sequencing. Bases called
v0.980904.e. Vector identified by cro
and -minmatch 12 options.
                                                                                                           Contact: Smith TPL
USDA, ARS, US Meat Animal Research Center
PO Box 166, Clay Center, NE 68933-0166, USA
                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Ruminantia;
Pecora; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BM289207
530751 MARC 3BOV Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Genome Res. 11 (4),
                                                                                                                                                                              11282978
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bos taurus (cow)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BM289207.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BM289207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FORWARD: AGGAAACAGCTATGACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCAGAGGCTCTTGGGATTG 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:9913"
/tissue_type="pooled"
/lab host="DH10B"
/lab host="DH10B"
/clone_lib="MARC 4BOV"
/note="Vector: pCMV SPORT6; Site_1: NotI; Site_2: SalI;
Library made from pooled tissue from day 20 and day 40 embryos."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1. .546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Bos taurus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GI:17998233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                626-630 (2001)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             l Research Center
NE 68933-0166, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6 bp mr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60;
BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    led and alt trimmed with cross_match with the -mi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 546;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ٥,
                                                                                                                                                                                                                                                                                                                                                  Stone, R.T.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -minscore 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Liang, F.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
RESULT 19
AQ702954/c
LOCUS
                                                                                                                FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                               High Throughput Sequencing Center
University of Washington
401 Queen Anne Avenue North, Seattle, WA 98109, USA
Tel: (206) 616-3618
Fax: (206) 616-3687
Email: jwallace@u.washington.edu
Clones are derived from the human BAC library RPCI-11. For BAC
library availability, please contact Pieter de Jong
(pieter@dejong.med.buffalo.edu). Clones may be purchased from
BACPAC Resources (http://bacpac.med.buffalo.edu/ordering_bac.htm)
or from Resear h Genetics (info@resgen.com). BAC end Web Server:
http://www.htsc.washington.edu
Plate: 1019 row: D column: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              429 AGCAGAGGCTCTTGGGATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        474 AGCAGAGGCTCTTGGGATTG 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AQ702954 558 bp DNA linear GSS 07-JUL-18_5443 Bl_B12 T7A RPCI-11 Human Male BAC Library Homo sapiens genomic clone Plate=1019 Col=23 Row=D, genomic survey sequence. AQ702954 C702954.1 GI:5412380
                                                                                                                                                          Seq primer: T7
Class: BAC end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae; Homo.

1 (bases 1 to 558)

1 (bases 1 to 558)

Mahairas,G.G., Wallace,J.C., Smith,K., Swartzell,S., Holzman,T., Keller,A., Shaker,R., Furlong,J., Young,J., Zhao,S., Adams,M.D.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       and -minmatch 12 options.
PCR PRimers
FORWARD: AGGAAACAGCTATGACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Mahairas GG, Wallace JC, Hood
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Plate: 144 row: I column: 4 Seq primer: ATTTAGGTGACACTATAG.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      scanning the human genome
Proc. Natl. Acad. Sci. U.S.A. 96 (17), 9739-9744 (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence-tagged connectors: A sequence approach to mapping
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BACKWARD: GTTTTCCCAGTCACGACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10449764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                            ass: BAC ends
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -minmatch 12 options
                                                                                                                                  quality sequence stop: 558.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="pooled"
/lab_host="DH10B"
/clone_lib="MARC_3BOV"
/clone_lib="MARC_3BOV"
/note="Vector: pCMV SPORT6; Site_1: Not1; Site_2: Sal1;
/ibrary made from pooled tissue from marrow, alveolar
macrophage, ovary, fetal semitendonosus muscle, and fetal
longissimus muscle."
                                                                                           1. .558
                     /mol_type="genomic DNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /organism="Bos taurus"
/mol_type="mRNA"
/db_xref="taxon:9913"
clone="Plate=1019 Col=23 Row=D"
                                                                   /organism="Homo sapiens"
                                                                                                           Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Cocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.6%; Score 20;
00.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 556;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GSS 07-JUL-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                     bac.htm)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
```

밁 S

```
RESULT 21
BW355953
LOCUS
                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 20
BW220108
LOCUS
                                        SOURCE
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                               ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DEFINITION
                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 source
                                                                                                                                                                                                                                                                   106 AAAGAGGCTGCTGATTTAGA 125
                                                                                                                                                                                                                                            484 AAAGAGGCTGCTGATTTAGA 503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   211 GGAGTGATTGTAAATGTTTT 230
                                                                                                                                                                                                                                                                                                             20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41 GGAGTGATTGTAAATGTTTT 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               20;
Ciona intestinalis
Ciona intestinalis
Eukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
Phlebobranchia; Cionidae; Ciona.
                                                                                                                       BW355953

S94 bp mRNA linear EST 27-MAY-200.

BW355953 Yutaka Satou unpublished cDNA library, mature adult whole animal Ciona intestinalis cDNA clone cima808g18 5', mRNA sequence.
                                                                       BW355953.1 GI:47767754
EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 (bases 1 to 587)
Satou, Y., Shin-i, T., Kohara, Y. and Satoh, N.
Expressed genes in Ciona intestinalis (2002c)
Unpublished (2002)
                                                                                                                                                           BW355953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BW220108 Satch unpublished cDNA library, egg Ciona intestinalis cDNA clone cieg098g07 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 81-75-753-4081 Fax: 81-75-705-1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Nori Satoh
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bukaryota; Metazoa; Chordata; Urochordata; Ascidiacea; Enterogona;
Phlebobranchia; Cionidae; Ciona.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ciona intestinalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ciona intestinalis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BW220108.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BW220108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Kyoto University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                                                                                                                             Conservative (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /sex="male"
/clone_lib="RPCI-11 Human Male_BAC_Library"
/clone_lib="RPCI-11 Human Male_BAC_Library"
/note="Vector: pBACe3.6; Site_1: EcoRI; Site_2: EcoRI;
Male_blood_DNA was isolated from one randomly chosen do and partially digested with a combination of EcoRI and EcoRI Methylase. Size_selected_DNA was cloned into the
                                                                                                                                                                                                                                                                                                                                                                                     /organism="Ciona intestinalis"
/mol type="mRNA"
/db xref="taxon:7719"
/clone="cteg098g07"
/tissue_type="whole animal"
/dev_stage="egg"
/clone_lib="Nori Satoh unpublished cDNA library, egg"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pBACe3.6 vector at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:24736531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.6%;
                                                                                                                                                                                                                                                                                                                           3.6%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                           <u>.</u>.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EcoRI sites"
                                                                                                                                                                                                                                                                                                                           DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB 9;
                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                           Length 587;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 558;
                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                          EST 27-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 02-JUN-2005
                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               donor
                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

밁 Ş

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 22
DT014963/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                           BTILLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        106 AAAGAGGCTGCTGATTTAGA 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Satou,Y., Shin-i,T., Kohar
Expressed genes in Ciona i
Unpublished (2004)
Contact: Yutaka Satou
Department of Zoology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260 AAAGAGGCTGCTGATTTAGA 279
                                                                                                                                                                                Plate: 094
Seq primer:
High quality
                                                                                                                                                                                                                                                                                                                                MS200,
Tel: 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Vitis vinifera
Vitis vinifera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DT014963 599 bp mRNA linear VVI094G04_597394 CabSau Flower Stage 12 (FLOu0012) CDNA clone VVI094G04 5, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sakyo-ku, Kyoto, Kyoto 606-8502, Japan
Tel: 81-75-753-4095
Fax: 81-75-705-1113
                                                                                                                                                                                                 BACKWARD: SP6 18mer
Plate: 094 row: G column: 04
Seq primer: T7 20mer (forward)
                                                                                                                                                                                                                                                                                                                                                               Department of Biochemistry
University of Nevada
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 (bases 1 to 599)
Iocco, P., Hua, C., Davies, C. and Thomas, M.R.
Expressed sequence tags from the grapevine cultivar Cabernet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; Vitaceae; Vitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DT014963
DT014963.1 GI:71865908
                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Cushman JC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Kyoto University
                                                                                                                                                                                                                                                         FORWARD: T7 20mer (forward)
                                                                                                                                                                                                                                                                             PCR PRimers
                                                                                                                                                                                                                                                                                          Email: jcushman@unr.edu
                                                                                                                                                                                                                                                                                                               Fax: 775-784-1650
                                                                                                                                                                                                                                                                                                                                                                                                                     Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                        Sauvignon
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (bases 1 to 594)
                                                                                                                                                                quality sequence stop: 599
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                775-784-1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                Reno, NV 89557-0014, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       yutaka@ascidian.zool.kyoto-u.ac.jp.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="cima808g18"
/tissue_type="whole animal"
/dev_stage="mature adult"
/clone_lib="Yutaka Satou unpublished cDNA library, mature
adult whole animal"
                                                                                       /organism="Vitis vinifera"
/mol_type="mRNA"
/cultivar="Cabernet Sauvignon"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Ciona intestinalis"
/mol_type="mRNA"
/db_xref="taxon:7719"
/sex="Hermaphrodite"
/dev_stage="12 - modified E-L system"
/clone_lib="CabSau Flower Stage 12 (FLOu0012)"
                                                         /clone="VVI094G04"
                                                                          db_xref="taxon:29760"
                                                                                                                                                   . .599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Kohara, Y. and Satoh, N. iona intestinalis (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 594;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EST 05-AUG-2005
Vitis vinifera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORIGIN
                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CL347309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AUTHORS
                                                                                                                                                                                                                                                                            source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Through Comparative Genomics
Unpublished (2004)
Other GSS8: RPCI44 272M24.r
Contact: Lawrence B. Schook
Department of Animal Sciences
University of Illinois at Urbana Champaign
1201 W. Gregory Dr., Urbana, IL 61801, USA
Tel: 217 265 5326
Fax: 217 244 5617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116 AAGAGGTTGCAGAAGAGAGA 97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   350 AAGAGGTTGCAGAAGAGAGA 369
                                                                                                                                                                                                                                                                                                                                               Initiative)
Plate: 272 row: M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20;
                                                                                                                                                                                                                                                                                                                                                                                                                         Clones are derived from the porcine BAC library RPCI-44 (http://www.bacpac.chori.org/porcine242.htm). For BAC library availability, please contact Pieter de Jong (pdejong@chori.org). Clones may be purchased from BACPAC Resources (http://BACPACorders.chori.org). This work was undertaken as part of the International Swine Genome Sequencing Consortium by University of Illinois at Urbana Champaign, USA with funds provided by grant No. AG2002-34480-11828 from USDA-CSREES and AG2001-35205-09965 from USDA/NRI (Livestock Genome Sequencing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CL347309 650 bp DNA linear GSS 19-AUG-2004
RPCI44 272M24.f RPCI-44 Sus scrofa genomic clone RPCI44 272M24,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rogatcheva,M.B., Meyers,S., He,W., Larkin,D.M., Marron,B.M., Beever,J.E. and Schook,L.B.
Piggy-BACing the Human Genome: Constructing a Porcine Physical Map
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sus scrofa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ČL347309
CL347309.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sus scrofa (pig)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genomic survey sequence
                                                                                                                                                                                                                                                                                                                               Seq primer: T7
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: schook@uiuc.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (bases 1 to 650)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.6%; Score 20;
llarity 100.0%; Pred. No.
Conservative 0; Mismatcl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /note="Organ: Inflorescence including flowers; Vector: pZL; A cDNA library from immature inflorescences at stage 12 of the modified E-L system. Tissue collected from field grown plants. A description of the modified B-L system can be found in the paper by B. G. Coombe 'Adoption of a system for identifying grapevine growth stages' (1995) Aust. J. Grape and Wine Res. 1: 104-110."
/cell_type="blood"
/clone_lib="RPCI-44"
/note="Vector: pTARBAC2; Site_1: EcoRI; Site_2: EcoRI;
porcine male BAC library produced by Pieter de Jong"
                                                                                                                                                                                Meishan)"
                                                                                                                                                                                                                           /organism="Sus scrofa"
/mol_type="genomic DNA
                                                                                                                                                                                                                                                                            1. .650
                                                                                                   /clone="RPCI44_272M24"
/sex="male"
                                                                                                                                                                                                  /mol_type="genomic DNA"
/strain="four pigs (breed:
                                                                                                                                                                                                                                                                                                 location/Qualifiers
                                                                                                                                                    db_xref="taxon:9823"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GI:51399278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Meyers, S., He, W., Larkin, D.M., Marron, B.M.,
                                                                                                                                                                                                                                                                                                                                                                                column: 24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 8;
                                                                                                                                                                                                       37.5% Yorks Landrace and 25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 599;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         °,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

ORIGIN

```
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 24
DT014681/c
                                                                                                                8
                                                                                                                                      5
                                                RESULT 25
AF062715/c
                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                     DEFINITION
                                     Pocas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DEFINITION
                                                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 272
                                                                                                                133
                                                                                                                                           350 AAGAGGTTGCAGAAGAGAGA 369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 178 ATCTTCCAAAATAAAATGAT 197
AF062715 721 bp AF062715 Homo sapiens library (Yu HA0033, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Plate: 091 row: D column: 02
Seq primer: T7 20mer (forward)
High quality sequence stop: 652.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MS200, Reno, NV 89557-0014, USA
Tel: 775-784-1918
Fax: 775-784-1650
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vitis vinifera
Vitis vinifera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA clone VVI091D02 5,
DT014681
DT014681.1 GI:71865626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VVI091D02_596830 CabSau Flower Stage 12 (FLOu0012) Vitis vinifera CDNA clone VVI091D02 5, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FORWARD: T7 20mer (forward)
BACKWARD: SP6 18mer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Department of Biochemistry University of Nevada
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Cushman JC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; Vitaceae; Vitis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PCR PRimers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Expressed sequence tags from the grapevine cultivar Cabernet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Iocco,P., Hua,C., Davies,C. and Thomas,M.R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCTTCCAAAATAAAATGAT 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (bases 1 to 652)
                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   jcushman@unr.edu
                                                                                                                                                                                                                                              /dev_stage="12 - modified E-L system"
/dev_stage="12 - modified E-L system"
/clone_lib="cabSau Flower Stage 12 (FLOu0012)"
/clone_lib="cabSau Flower Stage 12 (FLOu0012)"
/note="Organ: Inflorescence including flowers; Vector:
pZL; A cDNA library from immature inflorescences at stage
12 of the modified E-L system. Tissue collected from
field grown plants. A description of the modified B-L
system can be found in the paper by B. G. Coombe
'Adoption of a system for identifying grapevine growth
stages' (1995) Aust. J. Grape and Wine Res. 1: 104-110."
                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Vitis vinifera"
/mol type="mRNA"
/culfivar="Cabernet Sauvignon"
/db_xref="taxon:29760"
                                                                                                                                                                                                                                                                                                                                                                                                               clone="VVI091D02"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . 652
                                                                                                                                                                                     3.6%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.6%; Score 20; 100.0%; Pred. No.
                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
            mRNA
                                                                                                                                                                                       DB 8;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 10;
60;
                   Homo
                                                                                                                                                                       <u>,,</u>
                                                                                                                                                                                                    Length 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 650
                sapiens
                                linear
                                                                                                                                                                       Indels
                   cDNA clone
                                EST 03-MAY-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EST 05-AUG-2005
                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
VERSION
KEYWORDS
   ORIGIN
                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AI110607/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local
                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE
                                                                                                                                                                                                                                                                                                                              AUTHORS
                                                                                                                                        source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             207 TGTTGGAGTGATTGTAAATG 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AF062715
AF062715.1
EST.
                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                          AI110607.1
EST.
                                                                                                                                                                                                                                                                                                                            Yu,Y., Zhang,C., Luo,L.,
                                                                                                                                                                                                                                                                                                                                            Hominidae; Homo.
1 (bases 1 to 721)
                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HA0033
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Hominidae; Homo.

1 (bases 1 to 721)

Yu, Y., Dong, C. and He, F.
                                                                                                                                                                     Email: yyt48@yahoo.com
                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: yyt48@yahoo.com.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Finding some ESTs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTGGAGTGATTGTAAATG 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ilarity 100.0%;
Conservative
                                                                                                                                                     ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:6359472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GI:4731771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>,,</u>
```

```
Contact: Yongtao Yu
Department of Hematology
Beijing Institute of Radiation Medicine
27 Taiping Road, Beijing 100850, P.R.China
Tel: 0086-10-68159479
Fax: 0086-10-68214653
                                                                                                                                                                                                                                                                                                                                                                                                           Expression profile analysis of a human fetal liver cDNA library Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Yongtao Yu
Department of Hematology
Beijing Institute of Radiation Medicine
Beijing Road, Beijing 100850, P.R.China
Tel: 0086-10-68159479
Fax: 0086-10-68214653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Human fetal liver cDNA library Homo sapiens cDNA, mRNA
/organism="Homo sapiens"
/mol type="mRNA"
/mol type="mRNA"
/db xref="taxon:9606"
/tissue_type="liver"
/dev stage="fetal"
/lab_host="MC1061/P3"
/clone_lib="Human fetal liver cDNA library"
/note="Vector: pCDNA1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="HA0033"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone_lib="Homo sapiens library (Yu Y)"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Chordata; Craniata; Vertebrata; Euteleostomi; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ouyang, S., Li, W., Wu, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 1;
61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 721;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zhou, S., Liu, M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST 11-NOV-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
PUBMED
REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 REFERENCE
AUTHORS
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCUS
DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 27
AG594544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                              ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 20; Conserv
                                                              Matches
                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    JOURNAL
                                                                                                                                                                                                                                                                         source
82
                                                                                                                                                                                                                                                                                                                                                                                               Submitted (17-NOV-2003) Masahira Hattori, The Institute of Physical and Chemical Research (RIKEN), Genomic Sciences Center (GSC); 1-7-22 Suehiro-chou, Tsurumi-ku, Yokohama, Kanagawa, 230-0045, Japan (E-mail:hattori@gsc.riken.jp, URL:http://hgp.gsc.riken.go.jp/, Tel:81-45-503-9111, Fax:81-45-503-9170)

Clones are derived from the mouse BAC library MSMg01. For BAC library availability, please contact Kuniya Abe (abe@rtc.riken.jp). Tsukuba Institude, Bio Resource Center, miya Abe (abe@rtc.riken.jp). Tsukuba Institute of Physical and Chemical Research (RIKEN) 3-1-1 Koyadai, Tsukuba, 305-0074 Japan phone: 81-298-36-9189, fax: 81-298-36-9199
e-mail: abe@rtc.riken.jp
                                                                                                                                                                                                                                                                                                        R.Site 1
R.Site 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shiroishi, T.

Contribution of Asian mouse subspecies Mus musculus genomic constitution of strain C57BL/6J, as defined sequence-SNP analysis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AG594544
Mus musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2 (bases 1 to 774)
Hattori, M., Toyoda, A., Noguchi, H., Kojima, T. and Sakaki, Y.
Direct Submission
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eut
Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia;
Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mus musculus molossinus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AG594544.1 GI:48355374
GSS.
                                                                                                                                                                                                                                                                                                                                                       Sequencing : TJ
LIBRARY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Genome Res. 14 (12), 2439-2447 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Abe, K.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mus musculus molossinus (Japanese wild mouse)
                                                                                                                                                                                                                                                                                                                                                                                        PRIMERS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   L5574823
                  GGTAGCAGAGGCTCTTGGGA 490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTGGAGTGATTGTAAATG 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTGGAGTGATTGTAAATG 226
                                                          3.6%;
llarity 100.0%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Noguchi, H.,
                                                                                                                                                                                     /organism="Mus musculus molossinus"
|mol type="genomic DNA"
|sub_specise="molossinus"
|db_xref="taxon:57486"
|clone="MSMg01-524H14.TJ"
                                                                                                                                                                                                                                                                        Location/Qualifiers
                                                                                                                                          /tissue_type="mixture of kidney and spleen"
/clone_Tib="MSMg01 Mouse Male BAC Library"
                                                                                                                                                                         /sex="male"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            guchi,H., Tagawa,K., Yuzuriha,M., Toyoda,A., I
Saitou,N., Hattori,M., Sakaki,Y., Moriwaki,K.
                                                                                                                                                                                                                                                                                                                     : pBACe3.6
: EcoRI
                                                                                                                                                                                                                                                                                                        : EcoRI.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3.6%; Score 20; DB
100.0%; Pred. No. 61.
ative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              molossinus
                                                            0;
                                                                           Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DNA,
                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           clone:MSMg01-524H14.TJ, genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 1;
61;
                                                                             DB 10;
61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 721;
                                                                                         Length 774;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               molossinus
by BAC-end
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GSS 23-DEC-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Euteleostomi;
                                                          <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Kojima, T.,
                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6
                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                          REFERENCE
AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                      KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                     RESULT 29
CC855478
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 28
BZ717132/c
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
                                                                                                                                                                                                                                                                        ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DEFINITION
                                                                             COMMENT
                                                                                                                                                                                                                                                                                                    DEFINITION
                                                                                                                                                                                                                                                       VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pocas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                      577
                                                                                                                                                                                                                                         GSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Zea mays
```

```
Query Match
Best Local Similarity
Matches 20; Conserv
                                                                                                      Aedes aegypti (yellow fever mosquito)
Aedes aegypti
Bukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pteryg
Neoptera; Endopterygota; Diptera; Nematocera; Culicoidea;
Culicidae; Culicinae; Culicini; Aedes; Stegomyia.

1 (bases 1 to 815)
Loftus, B., Shetty, J., Knudson, D. and Severson, D.
BAC end sequencing of Aedes aegypti
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                   NDL.36C7.SP6 Notre Dame Liverpool
NotreDame Liverpool-36C7, genomic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  genomic survey sequence.
BZ717132
BZ717132.1 GI:28502185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea
                                                                         Other_GSSs: NDL.36C7.T7
Contact: Brendan Loftus
                                                                                                                                                                                                                                                                                                 CC855478.1 GI:33211395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 301-838-5843
Fax: 301-838-0208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Cathy Whitelaw
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Maize Genomics Consortium 
Unpublished (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (bases 1 to 797)
Whitelaw, C.A., Quackenbush, J.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BZ717132
PUCGG02TD ZM_0.6_1.0_KB
9712 Medical Center Drive, Rockville, Tel: 301-838-3543
                                                      Department of Eukaryotic Genomics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Class: sheared ends.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Seq primer: TF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Email: whitelaw@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9712 Medical Center Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bennetzen, J
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Resnick, A., Fraser, C.M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTATCTTCCAAAATAAAAT 558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTATCTTCCAAAATAAAAT 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /clone="ZMMBTa139B03"
/clone_lib="ZM_0.6_1.0_KB"
/note="Vector: pCR4-TOPO; Site_1: EcoRI; 0.6-1.0
/note="Vector: pcR4-TOPO; DNA library"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="genomic DNA"
/strain="B73"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      organism="Zea mays"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  db_xref="taxon:4577"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 20;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Yuan, Y.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mays
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Van Aken, S.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             . 61;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        genomic
                                                                                                                                                                                                                                                                                                                                    Aedes aegypti g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               n Aken,S., Utterback,T.,
San Miguel,P., Ma,J. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9;
                   ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 797;
                 20850, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EAR GSS 24-FEB-2003
ZMMBTa139B03,
                                                                                                                                                                                                                                                                                                                                                      genomic clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        kb high
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

```
RESULT 30
CB558744/c
LOCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
VERSION
                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                         FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AUTHORS
TITLE
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    116 CTGATTTAGAAGCAGAAGCA 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: enta@tigr.org
Library was provided l
Seq primer: SP6
Class: BAC ends.
                                                                                                                                                                                                                                                                                                                                                                          Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Igor Dawid
cDNA Library Preparation: Life Technologies, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: NCI-CGAP clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CB558744 974 bp
AGENCOURT_12929680 NICHD_XGC_Kid1
IMAGE:4030758 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tumor Gene Index
Unpublished (1997)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCI-CGAP http://www.ncbi.nlm.nih.gov/ncicgap.
National Cancer Institute, Cancer Genome Anatomy Project (CGAP),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CB558744
CB558744.1 GI:29478274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xenopodinae; Xenopus; Xenopus.
1 (bases 1 to 974)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Xenopus laevis (African clawed frog)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATTTAGAAGCAGAAGCA 576
                                                                                                                                                                                                                                                                                                                                       e: LLAM9297 row: b column: quality sequence stop: 376.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.6%;
ilarity 100.0%;
Conservative 0
                                                                        /clone="IMAGE:4030758"
/lab host="DH10B (phage-resistant)"
/clone lib="NICHD KGC_Kid1"
/clone Togan: kidney; Vector: pCMV-SPORT6; Site 1: Sall;
/note="Organ: kidney; Vector: pCMV-SPORT6; Site 1: Sall;
/site 2: Not1; Cloned unidirectionally, Primer: Oligo dT.
Average insert size 2.2 kb. Constructed by Life
Technologies. Note: This is a Xenopus Gene Collection
(XGC) library."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="NotreDame Liverpool-3607"
/clone_lib="Notre Dame Liverpool"
/rote="Vector: pECBAC1; Site_1: Hind III; The library
prepared from whole body tissue of newly hatched L1 la
by David Severson at the University of Notre Dame and
                                                                                                                                                                                                                                        /organism="Xenopus laevis"
/mol_type="mRNA"
/db_xref="taxon:8355"
                                                                                                                                                                                                                                                                                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Aedes aegypti"
/mol_type="genomic DNA"
/strain="Liverpool"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   db_xref="taxon:7159"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ocation/Qualifiers
                                                                                                                                                                                                                                                                                                    .974
  3.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Zhang"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 20;
; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           by David Severson
    Score 20;
Pred. No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches
DB
62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Xenopus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mRNA
                  6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                  Length 974;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 815;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EST 02-APR-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       was
                                                                                                                                                                                                                                                                                                                                                                                                                   be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
KEYWORDS
SOURCE
ORGANISM
                                                                                                                                                                                                                                               RESULT 32
CN351365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        REFERENCE
AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCESSION
VERSION
KEYWORDS
SOURCE
                                                                                                                                                                                 ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 31
BH770411/c
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                 REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                  DEFINITION
                                                                                                                                                                                                                                  POCUS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                  Best Local
Matches 2
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
 TITLE
                                                  AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      source
                                                                                                                                                                                                                                                                                                                   408 GCTGCTGATTTAGAAGCAGA 389
                                                                                                                                                                                                                                                                                                                                                  112 GCTGCTGATTTAGAAGCAGA 131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221 TAAATGTTTTAGAAGATCAT 240
                                                                                                                                                                                               CN351365
17000532184997 (
CN351365
            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 140)

Brandenberger,R., Wei,H., Zhang,S., Lei,S., Murage,J., Fisk,G.J., Li,Y., Xu,C., Fang,R., Guegler,K., Rao,M.S., Mandalam,R., Lebkowski,J and Stanton,L.W.
                                                                                                                                                                                                                                                                                                                                                                                  20;
                                                                                                                                 Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 (bases 1 to 1175)
Bolotin,A., Ehrlich,S.D. and Sorokin,A.
Studies of genomes of dairy bacteria Lactococcus
Sci. Aliments (2002) In press
                                                                                                                                                Homo sapiens (human)
                                                                                                                                                                     EST
                                                                                                                                                                                   CN351365.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CRJ INRA, Domaine de 1
Tel: 33 1 34 65 25 16
Fax: 33 1 34 65 25 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lactococcus lactis subsp. cremoris
Lactococcus lactis subsp. cremoris
Bacteria; Firmicutes; Lactobacillales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GSS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            20;
Transcriptome characterization elucidates signaling networks that
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: sorokine@jouy.inra.fr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Genetique Microbienne
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Sorokin A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BH770411.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LLMGtag184 MG1363 Random Sequence Tag Library Lactococcus lactis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BH770411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    best homologue in strain IL1403 is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         subsp. cremoris
                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAAATGTTTTAGAAGATCAT 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  quality sequence start: 30 quality sequence stop: 1147. Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                              /sub_species="cremoris"
/db_xref="taxon:1359"
/clone_lib="MG1363 Random Sequence Tag Library"
/clone_lib="MG1363 Random Sequence Tag Library"
/note="Vector: psgMU2; Site_1: SmaI; Library of
chromosomal fragments of L.Tactis strain MG1363 was
prepared by partial AluI digestion or by sonication."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Lactococcus lactis subsp. cremoris"
/mol_type="genomic DNA"
/strain="MG1363"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Domaine de Vilvert, 78352
                                                                                                                                                                                   GI:47351299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GI:20373368
                                                                                                                                                                                                                                                                                                                                                                                                3.6%; Score 20;
100.0%; Pred. No.
                                                                                                                                                                                                                  GRN_EB Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       genomic,
                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                  140 bp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         genomic survey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                  DB 9;
63;
                                                                                                                                                                                                                  mRNA
CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    obgL (84%)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Јоцу
                                                                                                                                                                                                                                                                                                                                                                                 <u>..</u>
                                                                                                                                                                                                               5,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Streptococcaceae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1175;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     en Josas cedex,
                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                               mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                  EST 16-MAY-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GSS 01-MAY-2002
                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       France
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 33
BI033292/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMMENT
   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
ACCESSION
                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOURCE
ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Locus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                JOURNAL
PUBMED
                                                                                                                                                                                                                                                                                                                   JOURNAL
                                                                                                                                                                                                                                                                                                                                                       TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               365 AGAGAAATACAAAAGTGAT 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Nat. Bio
15146197
                                                                Email: asimpson@ludwig.org.br
This sequence was derived from the FAPESP/LICR Human Cancer Genome
Project. This entry can be seen in the following URL
(http://www.ludwig.org.br/scripts/gethtml2.pl?tl=PM2&t2=PM2-NN0088-
110201-003-f12&t3=2001-02_ll&t4=1)
                                                                                                                                                                                                                                                                                                                                                                   1 (bases 1 to 173)
Dias Neto,E., Garcia Correa,R., Verjovski-Almeida,S., Briones,M.R.,
Nagai,M.A., da Silva,W. Jr., Zago,M.A., Bordin,S., Costa,F.F.,
Goldman,G.H., Carvalho,A.F., Matsukuma,A., Baia,G.S., Simpson,D.H.,
Brunstein,A., deOliveira,P.S., Bucher,P., Jongeneel,C.V.,
O'Hare,M.J., Soares,F., Brentani,R.R., Reis,L.F., de Souza,S.J. and
Simpson,A.J.
Seq primer: puc 18 forward
High quality sequence start: 11
High quality sequence stop: 173.
Location/Qualifiers
                                                                                                                                                                                                                   Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
Rua Prof. Antonio Prudente 109, 4 andar,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BI033292
BI033292.1 GI:14439918
                                                                                                                                                                Tel: +55-11-2704922
Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Geron Corporation
                                                                                                                                                                                                                                                                                                                                                   Shotgun sequencing of the human transcriptome with ORF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PM2-NN0088-110201-003-f12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fax: 650 473 7760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Regenerative Medicine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    control human
                                                                                                                                                                                                                                                                                                                 Proc. Natl. Acad. Sci. U.S.A.
                                                                                                                                                                                                                                                                                                                                  sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGAAATACAAAAGTGAT 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Constitution Drive, Menlo Park,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biotechnol.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        650 473 8658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /tissue_type="embryonic stem cells, embryoid bodies derived from H1, H7 and H9 cells" /clone_lib="GRN_EB" /clone_lib="GRN_EB" /note="oligo dT_primed, full-length enriched cDNA library from embryoid body outgrowths derived from hES cell lines H1 (p22), H7 (p29), and H9 (p26) maintained in feeder-free conditions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Brandenberger
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3.4%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ES cell growth and differentiation ol. 22 (6), 707-716 (2004)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   o
;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 19; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              173 bp mRNA lir
2 NN0088 Homo sapiens
                                                                                                                                                                                                                                                                                                                 97
                                                                                                                                                                                                                                                                                                             (7),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.8e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ξ
                                                                                                                                                                                                                                                                                                                 3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       94025,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 140;
                                                                                                                                                                                                                       01509-010,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CDNA,
                                                                                                                                                                                                                     Sao
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST 14-JUN-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                     expressed
                                                                                                                                                                                                                       Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 34
BI315574/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCESSION
VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      госиз
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                    source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19;
```

```
source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           365 AGAGAAATACAAAAGTGAT 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    154 AGAGAAATACAAAAGTGAT 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shoemaker, R., Keim, P., Vodkin, L., Erpelding, J., Coryell, V., Khanna, A., Bolla, B., Marra, M., Hillier, L., Kucaba, T., Martin, J., Rhanna, A., Bolla, B., Marra, M., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
Public Soybean EST Project
Unpublished (1999)
Contact: Shoemaker R./Public Soybean EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   EST.
Glycine max (soybean)
Glycine max
                                                                                                                                                                                                                                                                                                                                                                                                              Bmail: est@watson.wustl.edu
When it has been determined, an EST from the other end of this
When it has been determined, an EST from the other end of this
clone is listed in the 'Other ESTs on clone' field. Putative full
length read vector to vector length is 243 This clone is available
through: Biogenetic Services, 801 32nd Ave. Brookings, SD 57006 USA
(phone: 800 423 4163) email: info@biogeneticservices.com)
Seq primer: -40RP from Gibco.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Public Soybean EST Project
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Fabales; Fabaceae; Papilionoideae; Phaseoleae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BI315574.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ID: Gm-c1078-1983
BI315574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315574

BI315774

BI315574

BI315574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (bases 1 to 231)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
/db_xref="taxon:3847"
/clone="GENOME SYSTEMS CLONE ID: Gm-c1078-1983"
/tissue_type="Roots of 7 day old 'Bragg' supernodulating
mutant NTS382 seedlings"
/dev_stage="7 days old"
/dev_stage="7 days old"
/lab_host="UH108"
/clone_lib="Gm-c1078"
/clone_lib="Gm-c1078"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /note=Torgan: nervous normal; Vector: puc18; Site_1: SmaI; Site_2: SmaI, A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low stringency conditions."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                         /mol_type="mRNA"
/cultivar="Bragg NTS382"
                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                          organism="Glycine max"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3.4%; Score 19;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lib="NN0088"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Louis,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENOME SYSTEMS CLONE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63108,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EST 21-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         299 CATATAATGGACATTTAGT 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19;
                                  Ingolstaedter Landstr.1, D-85764 Neuherberg, Germany This is the 5' sequence of the clone insert Clone from S. Wiemann, Molecular Genome Analysis, German Cancer Research Center (DKFZ); Email s.wiemann@dkfz- heidelberg.de; sequenced by BMFZ (Biomedical Research Center at the Heinrich-Heine-University, Duesseldorf/Germann) within the cDNA sequencing consortium of the German Genome Project. No s1 sequence available. This clone (DKFZp779P1265) is available at the RZPD in Berlin. Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059
                                                                                                                                                                                                                                                                                Hominidae; Homo.

1 (bases 1 to 239)

Koehrer,K., Beyer,A., Mewes,H.W., Weil,B., Amid,C., Osanger,A., Fobo,G., Han,M. and Wiemann,S.

EST (Koehrer,K., Beyer,A., Mewes,H.W., Weil,B., Amid,C., et al. Unpublished (2003)
Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DKFZp779P1265_r1 779 (synonym: h
DKFZp779P1265_5', mRNA sequence.
                                                                                                                                                                                                                                                                  Contact: MIPS
                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BX501946.1 GI:32022762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BX501946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATATAATGGACATTTAGT 118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                XhoI; The mRNA was isolated from roots of 7 day old Bragg' supermodulating mutant NTS382 seedlings that were infected with Bradyhizobium japonicum, strain USBA 110, 48 hours prior to harvest. Dr. Gary Stacey generously donated the tissue. The roots were flash-frozen in liquid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       by Stratagene). This library was constucted in laboratory of Dr. Paul Keim and Dr. Virginia H. Northern Arizona University."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            nitrogen.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.4%; 50
100.0%; Prr
                                                                                                                                                                                                                                                                                                       Beyer, A., Mewes, H.W., Weil, B., Amid, C., et al.)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Stratagene's cDNA Synthesis Kit (catalog number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239 bp mRNA linear EST 04-SEP-2003 (synonym: hnccl) Homo sapiens cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 19;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 231;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Coryell at
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

RESULT 35 BX501946

DEFINITION

SOURCE ORGANISM

KEYWORDS

VERSION ACCESSION

REFERENCE

AUTHORS

COMMENT

TITLE

밁 ş ORIGIN

Matches

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 36
BE695762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                              FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PUBMED
                                                                                                                                                                                                                                                                   source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        365 AGAGAAATACAAAAGTGAT 383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 (bases 1 to 354)
Dias Neto, E., Garcia Correa, R., Verjovski-Almeida, S., Briones, M.R., Nagai, M.A., da Silva, W. Jr., Zago, M.A., Bordin, S., Costa, P.F., Goldman, G.H., Carvalho, A.F., Matsukuma, A., Baia, G.S., Simpson, D.H., Brunstein, A., deOliveira, P.S., Bucher, P., Jongeneel, C.V., O'Hare, M.J., Soares, F., Brentani, R.R., Reis, L.F., de Souza, S.J. and Simpson, A.J.
                                                                                                                                                                                                                                                                                                                                                       This sequence was derived from the FAPESP/LICR Human Cancer Genome Project. This entry can be seen in the following URL (http://www.ludwig.org.br/scripts/gethtml2.pl?tl=&t2=QV0-CT0225-280700-307-e06&t3=2000-07-28&t4=1)
Seq.primer: puc 18 forward
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Simpson A.J.G.
Laboratory of Cancer Genetics
Ludwig Institute for Cancer Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rua Prof. Antonio Prudente 109, 4 andar, 01509-010, Sao Paulo-SP,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proc. Natl.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence tags
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Shotgun sequencing of the human transcriptome with ORF expressed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QV0-CT0225-280700-307-e06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: asimpson@ludwig.org.br
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Fax: +55-11-2707001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Tel: +55-11-2704922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Brazil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BE695762.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BE695762
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGAAATACAAAAGTGAT 165
                                                                                                                                                                                                                                                                                                                quality sequence start: 68 quality sequence stop: 202.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
/clone lib="CT0225"
/note="Organ: colon; Vector: puc18; Site 1: SmaI; Site 2: SmaI; A mini-library was made by cloning products derived from ORESTES PCR (U.S. Letters Patent application No. 196,716 - Ludwig Institute for Cancer Research) profiles into the pUC 18 vector. Reverse transcription of tissue mRNA and cDNA amplification were performed under low
                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/dev_stage="Adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /lab_host="DH10B"
/clone_lib="779 (synonym: hnccl)"
/note="Vector: pSport1_Sfi; Site_1: SfiIA;
                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="DKFZp779P1265"
/tissue_type="liver"
/dev_stage="fetal"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Acad. Sci. U.S.A. 97 (7), 3491-3496 (2000)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 19; DB; Pred. No. 1.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          354 bp mRI
5 CT0225 Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 5;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.9e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          sapiens cDNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 239;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Site_2: SfiIB"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EST 11-SEP-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
RESULT 37
CO174612
                                                       ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VERSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pocus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     523 AATGCTCATCCGGATCCAG 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: immpratt@uga.edu

RNA prepared and library constructed by W. Walter Lorenz (School of Forest Resources, University of Georgia); plant material prepared by Craig Zimmermann (School of Forest Resources, University of Georgia) using rooted cuttings provided by the Forest Biology Research Cooperative (FRRC) and the CCLOMES project a the University of Florida; sequencing done in the Laboratory for Genomics and Bioinformatics, University of Georgia. Sequence ends have been trimmed to exclude vector and regions below Phred quality
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished (2004)
Other_ESTs: NDL1 45_D06.gl A029
Contact: Cordonnier-Pratt MM
Laboratory for Genomics and Bioinformatics
The University of Georgia, Department of Plant Biology
Plant Sciences Building, Rm. 2502, Athens, GA 30602-7271,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16. Three-prime sequences are presented as their reverse complement
and have been trimmed to exclude polyA.
Seq primer: M13-21 (TGTAAAACGACGGCCAGT)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tel: 706 542 1860
Fax: 706 583 0210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Coniferopsida; Coniferales; Pinaceae; Pinus; Pinus. 1 (bases 1 to 357)
Pratt,L., Cordonnier-Pratt,M.-M., Lorenz,W.W., Zimmermann,C. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NDL1 45_D06.bl_A029 Needles control Pinus taeda
NDL1 45_D06_A029 3', mRNA sequence.
CO174612
CO174612.1 GI:48947484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          POLYA=Yes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pinus taeda (loblolly pine)
Pinus taeda
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        An EST database from untreated loblolly pine (Pinus taeda) needles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATGCTCATCCGGATCCAG 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    J.F.D.
                                                                                                              /db_xref="taxon:3352"
/clone="NDL1 45 D06 A029"
/lab_nost="DH10B-T1 phage-resistant E. coli"
/lab_nost="DH10B-T1 phage-resistant E. coli"
/clone lib="Needles control"
/clone lib="Needles control"
/note="Torgan: needle; Vector: pSL1180; Site_1: EcoRI;
/note="Torgan: needle; Vector: pSL1180; Site_1: EcoRI;
/note="Torgan: needles colitor: pSL1180; Site_1: EcoRI;
/note="Torgan: needles colitor: pSL1180; Site_1: EcoRI;
/note="Torgan: needles colitor: polyA+ RNA
from the needles of 1-year-old loblolly pine (Pinus taeda)
cuttings that were rooted and then planted in washed sand.
Just before harvesting needles for RNA isolation, the
rooted cuttings were maintained for 27 days (April 2003)
under ambient conditions in a local greenhouse. They were
kept on a weekly regimen of 0.5x nutrient-complete
Hoagland's solution and supplemented with additional water
sufficient to maintain a 15% soil moisture content.
Double-stranded cDNA was cloned unidirectionally into
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Pinus taeda"
/mol_type="mRNA"
/strain="3 CCLONES"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3.4%;
                                                                           Inserts can be excised with EcoRI (5' end)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 19; DB 2;
Pred. No. 2e+02;
  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              357 bp
  19;
  멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mRNA
  7;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 354;
Length 357;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     EST 18-JUN-2004
A clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                      REFERENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VERSION
KEYWORDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                               SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOURCE
                                                                                                                                                                                                                                                                                                                   KEYWORDS
                                                                                                                                                                                                                                                                                                                                         VERSION
                                                                                                                                                                                                                                                                                                                                                                     ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                  Pocas
                         JOURNAL
                                                                                               TITLE
                                                                                                                                               AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AUTHORS
  PUBMED
```

```
TITLE
JOURNAL
COMMENT
                                                                                                                                                                                                                                                                                                                                                         RESULT 39
AL911633/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 38
BI123660/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   REFERENCE
                                                                                                                                                                                                                                                                                                                       DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                     ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188
                                                                                                                                                                                                                                                                                                                                                                                                                                            357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           310 TCTTCCAAAATAAATGAT 328
                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleon
Actinopterygii; Neopterygii; Teleostei; Ostariophysi;
Cypriniformes; Cyprinidae; Danio.

1 (bases 1 to 399)

10, J. Lee, S., Xu, M., F., Ruan, H., Eun, A., He, Y., Ma, W., Wang, W., and Peng, J.

15000 unique zebrafish EST clusters and their future use in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19;
                Genome Res. 1
                                                                                                                                                                                                                                                                           AL911633
AL911633 PJR-Z1+Z2 Danio
AL911633
AL911633.1 GI:23176903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Department of Biotechnology
Royal Institute of Technology
Teknikringen 30, Stockholm S-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Hertzberg,M., Aspeborg,H., Erlandsson,R., Bjorkbacka,H., Hiltonen,T., Karlsson,J., Teeri,T., Gustafsson,P., Bahlera Jansson,S., Nilsson,O., Sundberg,B., Nilsson,P., Uhlen,M., Sandberg,G. and Lundeberg,J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Populus tremula x Populus tremuloides
Populus tremula x Populus tremuloides
Populus tremula x Populus tremuloides
Evaluation y Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;
Spermatophyta; Magnoliophyta; eudicotyledons; Saliceae; Populus.
                                                      microarray for profiling gene expression
                                                                                                                                                                                                                     Danio rerio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (2001)
Contact: Erlandsson R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BI123660
386 bp mRNA linear 1026P75P Populus leaf cDNA library Populus tremula
                                                                                                                                                                                                                                        Danio rerio (zebrafish)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tel: 46 8 790 8287 Fax: 46 8 245452
12618376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: rikerl@biochem.kth.se.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gene expression in Populus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tremuloides cDNA, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATAAAATGATTCAAGCAAA 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTTCCAAAATAAATGAT 197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (bases 1 to 386)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.4%; Score 19; llarity 100.0%; Pred. No. Conservative 0; Mismatcl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /organism="Populus tremula x Populus tremuloides"
/mol_type="mRNA"
/db_xref="taxon:47664"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1. .386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone_lib="Populus
/note="Organ: leaf"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GI:18007635
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100.0%; ---
                (3),
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Stockholm S-10044,
                  455-466 (2003)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred. No. 2e+02;
); Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               leaf cDNA library
                                                                                                                                                                                                                                                                                                                     CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 2;
. 2e+02;
                                                                                                                                                                                                                                                                                                                                        mRNA
                                                                                                                                                                                                                                                                                                                     mRNA linear
clone 034-Cll-1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sweden
                                                                                                                   Eun, A., He, Y., Ma, W.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 386;
                                                        patterns during
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Bahlerao, R.,
                                                                                                                                                                                                Euteleostomi;
                                                                                                                                                                                                                                                                                                                                          EST 06-JUL-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST 31-DEC-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
REFERENCE
AUTHORS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 40
BM024201/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VERSION
KEYWORDS
                                                                                                   FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOURCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DEFINITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORIGIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pocas
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMMENT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE
JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 19; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ORGANISM
                                                                          source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           313 TGAATGTATGGCAGTTCAA 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       144 TGAATGTATGGCAGTTCAA 162
                                                                                                                                                                                                                                                                                                                                                                                  Contact: Stephen L. Johnson
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

1 (bases 1 to 399)

Clark, M., Johnson, S.L., Lehrach, H., Lee, R., Li, F., Marra, M., Eddy, S., Hillier, L., Kucaba, T., Martin, J., Beck, C., Wylie, T., Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R., Waterston, R. and Wilson, R.
                                                                                                                                                                                            RessourcenZentrumPrimarDatenbank, Berlin,
                                                                                                                                                                                                           cDNA Library Preparation: John Ngai. cDNA Library Arrayed by:
Matthew Clark. DNA Sequencing by: Washington University Genome
Sequencing Center Clone distribution: Genome Systems, St. Louis,
Missouri (web address: www.genomesystems.com) (email contact:
info@genomesystems.com) and Research Genetics, Huntsville, Alabama
(web address: www.resgen.com) (email contact: info@resgen.com) and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         WashU Zebrafish EST Project 1998
Unpublished (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM024201
BM024201.1 GI:16538557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BM024201 399 bp mRNA linear EST fu47dll.x1 zebrafish adult brain Danio rerio cDNA clone IMAGE:5332653 3', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Contact: Peng J
Lab of Functional Genomics
Institute of Molecular and Cell Biology
30 Medical Drive, Singapore, 117609, Singapore
Email: pengjr@imcb.a-star.edu.sg
Clone requests: info@openbiosystems.com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Danio rerio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Open Biosystems, 6705 Odyssey Drive, Huntsville, AL 35806.
                                                                                                                                                                                                                                                                                                                                                            Email: zbrafish@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Danio rerio (zebrafish)
                                                                                                                                                  primer: -40UP
                                                                                                                       quality sequence stop: 346.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
/organism="Danio rerio"
/mol_type="mRNA"
/db_xref="taxon:7955"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Danio rerio"
/mol_type="mRNA"
/strain="local wildtype"
/db_xref="taxon:7955"
                                                                                              Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /tissue_type="whole embryo
/dev_stage="mixed stages"
/clone_lib="PJR-Z1+Z2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="034-C11-1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.4%; Score 19; DB
100.0%; Pred. No. 2e+
vative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 1; Length 399; 2e+02;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or fish"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                                                                                                                                            Germany (web
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EST 26-JUL-2002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
/sex="mixed male and female"
/tissue_type="brain"
/dev_stage="adult"
/lab_host="E. coli DH10B"
/clone_lib="zebrafish adult brain"
/clone_lib="zebrafish adult brain"
/clone_"Vector: pZIPLOX; Site_1: NotI; Site_2: SalI;
/note="Vector: pZIPLOX; Site_1: NotI; Site_2: SalI;
/criginal library was constructed in lambdaZIPLOX. Mass excision of the cDNA library was performed to yield pZIPLOX plasmids. Insert check was done in original principle.

accision of the cDNA library was done in original principle.

accision of the cDNA library was done in original principle.

accision of the cDNA library was performed to yield pziPLOX, plasmids. Insert check was done in original principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDNA library was performed to yield principle.

accision of the cDN
```

ORIGIN

Query Match 3.4%; Score 19; DB 3; Length 399;
Best Local Similarity 100.0%; Pred. No. 2e+02;
Matches 19; Conservative 0; Mismatches 0; Indels 0; Gaps

Oy 144 TGAATGTATGGCAGTTCAA 162

Oy 144 TGAATGTATGGCAGTTCAA 314

0,

Search completed: April 11, 2006, 21:45:45

Job time: 7767.45 secs

THIS PAGE BLANK (USPTO)